The Rural Medical Educator group of the National Rural Health Association presents

Profiles of Rural Medical Educators

Created by Emily Onello, M.D.

Conversations with our nation's experts on reversing rural physician shortages



Created by Emily Onello MD

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Foreword

"How do we get docs to go rural?" This is a critical question. Many rural communities lack a physician. One out of five Americans lives in a rural location—about 66 million people. Physician shortages persist in hundreds of rural counties in our nation, and many rural and frontier counties lack a physician entirely. In the U.S., rural citizens experience limited access to many important mental, physical and dental health services. And the consequences of these limitations are dire. Rural residents demonstrate poorer health in a multitude of categories.

As of this writing, the COVID-19 pandemic maintains its grip on the United States and much of the world. For guidance in this pandemic, our nation looks to experienced physicians and public health authorities. Such experts have decades of infectious disease knowledge about how to quell an outbreak.

Just as epidemiologists and virologists are recognized as pandemic experts, the educators featured in this publication are experts on the challenges of rural physician shortages. Their collective expertise is highlighted here. They have dedicated their careers to developing and expanding successful rural educational programs. Some are still at the peak of their careers, while others are nearing or have reached retirement. They are located across the United States, yet they defy their geographic differences and have created a community of scholars and educators who share ideas and best practices. They are a national resource.

The story of the rural medical educator group began over thirty years ago. In October 1989, a conference centering on rural workforce problems was held in Seattle hosted by colleagues who were part of the WAMI consortium (Washington-Alaska-Montana-Idaho) medical colleges. This was followed by an AAMC (Association of American Medical Colleges) invitational conference in San Antonio Texas in February of 1990 on "Rural Health: A Challenge for Medical Education". This conference was well attended by many medical educators interested in support of improving rural medical care and training. These conferences brought the problems of training a rural workforce to the attention of the formal medical education organizations.

Successive meetings fed the passions of those interested in problem solving rural workforce issues and enabled the group to begin a loosely organized federation of scholars which sought allies in their quest. They sought affiliation with the AAMC as a more formalized group, then approached the American Academy of Family Physicians (AAFP) and then the Society of Teachers of Family Medicine (STFM). These approaches were unfruitful until the group approached the National Rural Health Association (NRHA) and was quite warmly received and supported. A strong core of semi-fanatics gathered, which has grown to be the Rural Medical Educators (RME) of the NRHA. The RME group continues to hold an annual conference in tandem with the NRHA gathering each spring.



In spring of 2020, as COVID-19 continued its spread across the U.S., prominent educators from the RME group were each invited to respond voluntarily to a common set of questions. Their responses demonstrate that much is already known about how to successfully develop a rural physician workforce. We should and must:

- Expand opportunities for rural youth to envision the possibility of becoming a doctor for themselves
- Cultivate authentic rural community partnerships with medical schools and residencies
- Demand that medical schools accept many more applicants from rural backgrounds
- Expose medical learners to practicing rural physicians
- Establish mentoring programs to support and maintain rural interest
- Provide rural training opportunities during residency
- Counter the 'big city' perceptions that rural practice is unrewarding
- Eliminate expectations that throwing loan repayment money will solve the problem

Readers may ask the next critical question. If so much is known, why do rural physician shortages persist?

The answer is not simple, and the responses provided by these rural medical educators highlight the complexity of the problem. One hundred years ago, half of the country's population lived in rural places. Now, just one-fifth. Though rural populations continue to grow, their growth rates are eclipsed by those of urban and suburban communities. Resources and political representation for rural communities has diminished over time.

The slogan of the NRHA is "Your voice. Louder." promising to raise the volume on the advocacy voice for rural community health. The work of the NRHA is to bring attention and healthcare resources to rural America. The interviews presented here in Profiles of Rural Medical Educators are among those voices.

The purpose of this project was to create a collective where the combined wisdom and experience of the participants could serve as a valuable resource for those committed to improving access to rural medical care. This publication is intended for educators, politicians, physicians, administrators, medical students, funders and, importantly, rural communities who seek to recruit and retain excellent doctors. Buttressed by the existing literature on the topic, the collective voices heard here demonstrate that an adequate rural physician workforce is not an impossible fantasy. Instead, it is a potential reality that will demand new commitments, resources, partnerships and passion to realize.

As time moves forward, there will be new rural medical educators who will take up the task of training our nation's future rural physician workforce. Hopefully, they will find direction and inspiration in their important work from the experts featured here in Profiles of Rural Medical Educators.

Emily Onello MD & James Boulger PhD
University of Minnesota Medical School Duluth Campus
August 2020





Mary Barinaga, M.D. Idaho

Birthplace: Ontario, Oregon Hometown: Cambridge, Idaho High School: Cambridge High School, Cambridge, Idaho

Undergraduate College/University: The College of Idaho, Caldwell, Idaho; Zoology, B.S.

Graduate School: The University of Washington School of Medicine, MD

As of 2020, how long have you been in rural education?

approximately 18 years, first as a Family Medicine physician preceptor in a rural town from about 2000-2010, then working for University of Washington School of Medicine/WWAMI as an assistant dean and coordinating our rural programs for Idaho (TRUST, the Targeted Rural Underserved Track)

Name and affiliation of key Rural Program(s) that you have developed or sustained?

The University of Washington School of Medicine's WWAMI program has several rural programs: RUOP, WRITE, and TRUST. I have worked with all of these as the program coordinator and administrator in Idaho.

Favorite rural location that you have visited in the U.S., and why:

My hometown Cambridge, Idaho, because this is where I grew up (pop. 350) and became the person who I am today!

[I understand] the importance of being a contributing member of my community to build a strong connection with others and make it a better place...

Barinaga

What is one of the most common myths or misconceptions about how to successfully recruit and retain doctors for rural medical practice?

One myth is that using money is the best incentive to recruit and retain physicians in rural /underserved settings. We all know that loan repayment and strong salaries help, but there is so much more to retaining physicians than throwing money at us! Thinking about jobs for partners, schools, recreation, and a sense of community is much more important.

When colleagues reminisce about your role and accomplishments in rural medical education, what do you think they will say?

I hope they will say that our Idaho Family Physician rural workforce is in a better place now than when I started with WWAMI, and that there are many more communities who are well-staffed with high quality, well-trained, full-scope primary care physicians in Idaho.

What kind of values have you cultivated and lived by?

The importance of being a contributing member of my community to build a strong connection with others and make it a better place; knowing and helping your neighbors, having good friends in your community that you can rely on (and vice versa)

What do you think is one of the most significant events that impacted rural medical education during your career?

Being able to do clerkships during medical school that were located in rural communities in my state of Idaho. It allowed me to see Family Physicians doing C-sections, inpatient/outpatient, procedures and know that I would never get bored. I also was impressed with the leadership roles that Family Physicians in rural communities took on in their communities.

How have you dealt with unsupportive leadership in institutions that did not appear to make rural medical training a priority?

Yes, I work within an institution that doesn't make rural a priority. If it weren't for the regional partners constantly standing up for rural training, it would be completely eroded away.

Who were your mentors and how did they impacted your career?

Family Physicians in rural Idaho that I was exposed to while growing up, as well as science teachers in my K-12 small rural school district, some of whom I still keep in touch with today.



During your time as a rural medical educator, what is your most humorous memory?

At one of our rural sites, the local large animal veterinarian takes our medical student out to do cow pregnancy checks at a dairy. It was hilarious to hear the student tell about that experience!

During your career, how have you dealt with insufficient funding/resources?

Honestly, it has been a big barrier. I've written grants to get funding to send students to experiences, worked with our local AFP chapter and medical association, asked for public donations, and donated money myself.

Imagine that you are gifted 50 million dollars for rural medical education. How would you spend this money to achieve the greatest impact on addressing rural medical workforce shortages?

Honestly, I would invest it in rural GME programs, like RTTs, and set up medical student LICs there. That money will go further if spent on GME.

Thinking back on your career, what 3 organizations have had the most influence on your ability to succeed?

RME (these are my people), Idaho Academy of Family Physicians, and the Idaho Medical Association.

What advice or recommendations for the RME group do you have for addressing physician shortages in rural America for the 21st century?

Work together with GME to collaborate. We should be doing more together.

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James Boulger, Ph.D. Minnesota

Birthplace: Minneapolis, MN Hometown: Minneapolis, MN High School: De La Salle High School, Minneapolis, MN

Undergraduate College/University:
University of St. Thomas, St Paul,
Minnesota; BA in Psychology/
Sociology

Graduate School: Ph.D., University of Minnesota, Psychology

As of 2020, how long have you been in rural education?

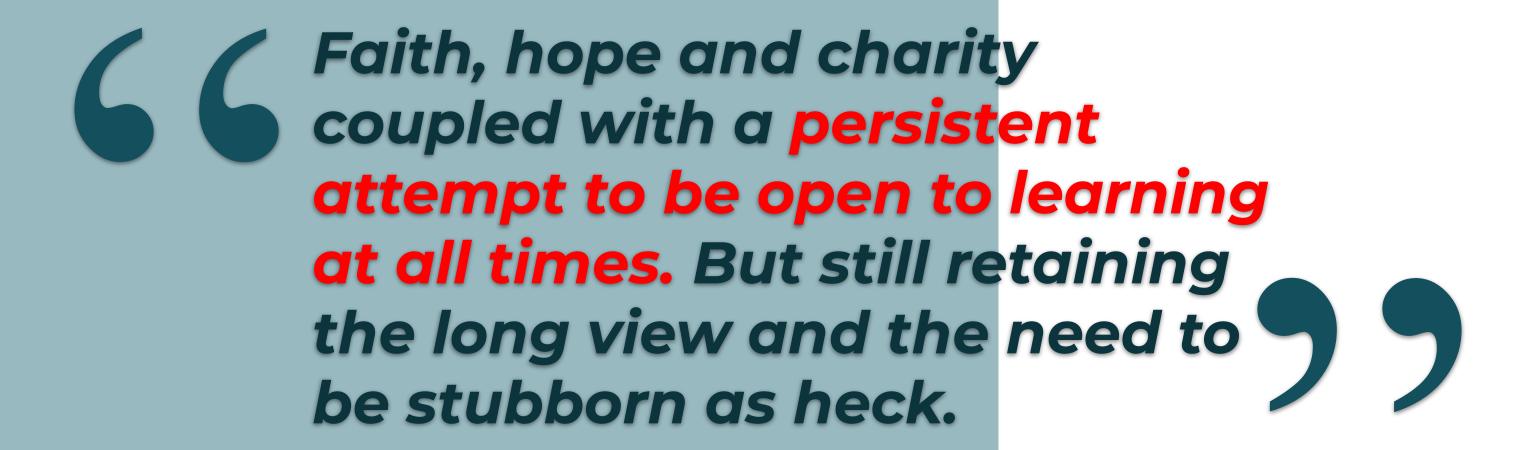
50 years

Name and affiliation of key Rural Program(s) that you have developed or sustained?

- Rural Practice Loan Repayment
 Program Ohio
- University of Minnesota Medical School, Duluth and Minneapolis campuses
- Duluth: Rural Family Medicine
 Preceptorship/Rural Medical
 Scholars Program 1974 present
- Minneapolis: Rural Physicians
 Associate Program Advisory Board:
 1975 2010

Favorite rural location that you have visited in the U.S., and why:

Greater Minnesota – diversity of geography, populations, resources, etc. coupled with a consistent emphasis on improving education, health and well-being in our communities.



Boulger

What is one of the most common myths or misconceptions about how to successfully recruit and retain doctors for rural medical practice?

You can buy your way to good health care and personnel. Patently absurd – folks live rural for many, many great reasons but money/salary is way down the list of determinants.

When colleagues reminisce about your role and accomplishments in rural medical education, what do you think they will say?

You can get a lot done by being in the game for a long and consistent fashion – quick fixes are typically not good for the long run. Stay the course.

What kind of values have you cultivated and lived by?

Faith, hope and charity coupled with a persistent attempt to be open to learning at all times. But still retaining the long view and the need to be stubborn as heck.

When colleagues reminisce about your role and accomplishments in rural medical education, what do you think they will say?

I hope they will say that I worked hard to increase the supply of rural physicians, was passionate in mentoring and supporting our rural students, and that I played an important role in advancing the rural medical education outcomes literature base.

What do you think is one of the most significant events that impacted rural medical education during your career?

Initiation of federal assistance plans in the '70's to support new models of medical education that held promise for meaningful change in outcomes in physician specialty choice and practice location.

How have you dealt with unsupportive leadership in institutions that did not appear to make rural medical training a priority?

Outlast them. I have, over the years and institutions, had over twenty deans, all of whom wished to make the school(s) better in many ways. Some have been very supportive of rural medical education, some less so. The consistency has to come from the individuals' investment in a cause – in this case the improvement and sustenance of a strong rural medical cadre. Dabblers need not apply – we need workers with values.

Who were your mentors and how did they impact your career? Many.

First, my parents, brothers and sisters who inculcated a value system based upon justice, brotherhood and caring for each other. My wife and sons who have supported me in every way through the educational journey that continues to shape me. And all the many medical and academic professionals I have worked with over the years - all really quite different from each other, but all developed a Messianic gleam in their eye when trying to change the world of rural medical education for the better.

The grit of Jack Verby as the Rural Physicians Associate Program was begun, the dedication of institutional will and ability to skate on thin ice administratively of Dr. Robert Carter (first Duluth Dean), the passion of Bob Bowman and his dedication to pushing for evidence-based programming needed for the betterment of rural citizens, the quiet and constant presence and persistence of Howard Rabinowitz, the noble and thoughtful efforts of Fitzhugh Mullen in trying to improve the health status of rural and other underserved communities.

The tremendous generosity of the earlier generations of "Family Doctors" (e.g. Ray Christensen, Ben Owens, Lyle Muneke, etc. as well as my GP when growing up, Dr. Robert Kelly) who cared so deeply for their patients and communities, Family Medicine department heads (Drs. Ed Ciriacy, Mac Baird, Byron Crouse and Ruth Westra).

Norman Rockwell who captured the spirit and essence of American medicine for all of the public on the covers of *The Saturday Evening Post*, and all of our students who continue the heritage of caring for the country.

There are so many that have inspired me and continue to do so – and I count among them my current colleagues in Duluth who are super colleagues (Emily, Jen, Ray, Ryan, Peter, etc.).

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During your time as a rural medical educator, what is a humorous memory?

About 10 years ago, while driving between communities on rural site visits to say thank you to the hundreds of physicians who have taught our students so well, I got a message relayed to me to call the University of Minnesota President ASAP. Now, that usually doesn't happen. So, when I got to Crosby, Minnesota I called the number that was left – and got the President directly. I wish I would have kept that number! He stated that he was going to make a trip to Faribault, Minnesota to address a community organization and wanted to "localize" his remarks by calling out any University-trained physicians in the audience. So I rattled off seven or eight names of alumni who were in practice in the area and their clinic affiliations. He paused the conversation and asked where I was calling from and wondered where I looked up that information that quickly. I informed him that I dd not have to look it up – once you get to know these folks as students, it is much more likely that you will remember them, where they end up, etc. After a moment of silence, the President said "Well, I'll be damned! Thank you" and disconnected.

During your career, how have you dealt with insufficient funding/resources?

Work harder and try to find external support sources. Work with the Alumni association of your medical school – they really cannot know the alums like you do but you can certainly enable mutually beneficial activities. Learn to write grants successfully. Be creative.

Imagine that you are gifted 50 million dollars for rural medical education. How would you spend this money to achieve the greatest impact on addressing rural medical workforce shortages?

I would develop a capitation grant program for medical schools, with very explicit verification procedures, that would send a check to be split between the medical school dean, the head of family medicine 50-50. For every medical school graduate who verifiably practices 75% time or more in a rural community (population less than 25,000 and not contiguous with an urban area), the school gets \$15,000 for each "success" every year. Make the check FULLY AND STRICTLY contingent on the measurable successful outcomes and available to the Dean and Department Head to use appropriately. Money does seem to get people's attention.

Thinking back on your career, what 3 organizations have had the most influence on your ability to succeed?

AAMC in earlier years. NRHA consistently. STFM.

What advice or recommendations for the RME group do you have for addressing physician shortages in rural America for the 21st century?

Take over Medical School Admissions Committees. Sacrifice yourself and get involved in medical student activities as well as Pre-med advisement. Only about 5% of the US medical students are from rural or frontier backgrounds. Find them and admit them. Consistently, this has been the best predictor. Next best is to identify future family doctors in the applicant pool – and accept them. These should be both positively and disproportionately selected. Have your school's funders (State, philanthropic, etc.) educated about your rural successes. Meet with pre-med groups and push rural in the colleges around your State – not just your home University. With medical students, get them all rural experiences. Require this. Just as all physicians should have the same set of basic skills regardless of specialty, so should they have experience during their training with rural and other underserved populations. Be patient – but be present.

Any additional comments:

Thanks to the Rural Medical Educators group and the NRHA for providing a forum and support for our critical mission.

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Robert Bowman, M.D. Nebraska/Arizona

Birthplace: Texas City, Texas

Hometown: Texas City

High School: Texas City High

School, 1972

Undergraduate College/University: Lamar University, B S in Chemistry 1976

Graduate School:

- Baylor College of Medicine 1980
- McLennan County FM Program 1983
- McLennan Teaching and Research Fellowship 1990

As of 2020, how long have you been in rural education?

I began my solo rural practice in Nowata OK with the help of a part time job at the original Bartlesville FM residency program. I have been teaching, researching, reflecting, writing, and delivering basic health access since that time.

The rural focus of the 1980s switched to rural and underserved with my association with ATSU SOMA and linkages to Community Health Centers for training. In more recent years my work indicates that rural is not specific to need or health access deficits. I developed more specific to the rural focus of the 1980s switched to rural and underserved with my association with ATSU SOMA and linkages to Community Health Centers for training.

In more recent years my work indicates that rural is not specific to need or health access deficits. I developed more specific tools:



There is nothing better than delivering complex care where most needed when well supported. There is nothing worse than attempting complex care where poorly supported and where patients are poorly supported.

- The Standard Primary Care Year measure of the contribution of each type of primary care source according to their class year (multiply their retention in primary care times years in a career times % active and adjusted for lower volume for PA and NP)
- This led to my publication Preventing Rural Workforce By Design https://www.rrh.org.au/journal/article/2852
- Physician distribution by concentration coding segments different parts of the nation by county concentrations of physicians. I started by zip coding the AMA Masterfile physicians and found that 1% of the land area or 1100 zip codes had 10% of the population and 45% of physicians with well over half of health care dollar expenditures as the most expensive hospital and practice costs were found there – the reward of procedural, technical, most specialized rewarded in the financial design. I found that workforce was concentrated in concentrations of people. Physician origins, training, and locations are more and more concentrated.
- Later I looked more at the county level, smoothing for adjacent counties. Deficits in a county are also present in adjacent counties. It is hard to access services in certain counties due to travel, time, types of services available, insurance plans, and other barriers.

Top 79	Higher 152	Lower 286 Proportion	Lowest 2621 Proportion
	20% of US Population		40% of US Population

This became more interesting to find that those higher are doing best while those lower are doing worst in health, education, and other areas. "Rural" is not specific, but lower concentration is specific to health care dollars, outcomes, and more.



Even more interesting is that the lower and lowest concentration populations have been growing fastest with stagnation in the top concentration counties – this points to costs of living and housing too high, driving out migration to lower concentration counties. Housing designs reveal the collapse of affordable and available housing in higher concentration settings. No effort can be seen that facilitates more workforce to address increasing numbers, demand, and complexity.

education or pipelines can help to better prepare graduates for rural practice, but are not the solution for deficits of workforce that are set in concrete by the financial design. It is true that various programs or schools or pipelines can demonstrate high proportions of graduates where needed. But it is not possible to document resolution of the access problems in Rural America, in underserved settings, in low income low power places, or in 2621 counties lowest in health care workforce.

My attention goes to the financial design for the practices and hospitals dying by design where most Americans most need care.

About 2621 counties, the ones lowest in healthcare workforce, have half enough generalists and general specialists and much less of everything else primarily because of the financial designs of government and private insurance. This involves 40% of the US including 75% of the rural population and 32% of the urban population. The rural population has some recognition as behind and some political power. The urban 32% has none of this. Mapping these counties out is essentially a Red County map in the last election although these counties have had different voting patterns in the past. What they continue to receive is the least attention and the designs worst for them from health, education, economic, and other designers. Since this population is growing fastest in the nation and will reach a majority some time in the 2050s, it demands awareness and attention. But in a nation with rule by the powerful, this is unlikely.

I have focused my attention on Basic Health Access for most Americans most behind as created by the designers who have crafted financial designs worse for people with the lowest workforce and with the worst public and private insurance plans that limit access even for those with locally available workforce.

I have focused on the generalist and general specialty practices that are closed and compromised by 15% lower payments (Medicare 2011 data), the practices that are going away by design along with the local workforce. These practices most commonly lack the facility fees paid to hospital outpatient care. They have had the greater costs per physician to address HITECH to MACRA to Primary Care Medical Home to value based set up by those who claim this will improve care when their designs are destroying care where needed

These are also the populations that inherently have the worst outcomes due to their social determinant and other personal and family situations. Managed care to pay for performance to value based specifically discriminate against them and those who serve them. This includes diverting billions more dollars a year away from local and sending those dollars to consultants, corporations, and CEOs far away that do not deliver care. The elderly, the poor, the disabled, the mentally ill, and those with chronic diseases are concentrated in these counties. They also have the least social support resources to go with the lowest health care workforce.

Hospital closures and practice closures have been most specific to these counties

As noted above, the populations in lower to lowest concentration counties with regard to health care workforce have been growing fastest.

Even faster growth can be seen in counties without a hospital – they are growing faster and more counties are being added due to hospital closure. The counties being added tend to have higher and higher population levels. Their ERs, ob units, ICU beds, local workforce, and local access are going away. Their social determinants are being designed away as well – and lesser outcomes are likely to follow.

Name & affiliation of key Rural Program(s) that you have developed or sustained?

- Bartlesville Family Medicine Residency Program faculty 1983 to 1986
- Baylor Family Medicine rural research 1987 to 1989
- Directed Rural Fellowship and Minifellowship and developed rural sites at East Tennessee State University 1989 – 1991, also started the Rural High School Career fair and numerous RME gatherings and communications
- Director of Rural Health and Education at the UNMC Department of Family Medicine 1992 to 2008 – site support and development, pipeline efforts, research and publications – obtained versions of the AMA Masterfile, worked with the Robert Graham Center on rural projects, coded the Masterfile for birth origins of physicians and specialty and outcomes (one of few who critically examine workforce)

For example, international physicians are considered a solution for health access. They are one of the worst sources, eventually the Graham Center publish much the same.

I also noted that the PA workforce expansions have failed to increase primary care. Entry data is published and a 100% increase in graduates results in over 200% more for non-primary care. The measly 30% primary care entry is lost within a decades due to departures. PA researchers eventually came to this conclusion. The same is true for the DO expansions with 3 doublings and no increase across any. US MD expansions are associated with fewer in primary care entry and far less who stay. NP data is largely hidden about career, but appears to be increasing numbers but major declines in retention – for little gain. NP and PA have increased in numbers and replaced many primary care physicians – but primary care delivery capacity has not changed. Financial design is the reason.

- Long term co-chair of the STFM Group on Rural Health, founding chair of the STFM Group on Admissions – that died for lack of interest in reshaping medical school admissions in favor of health access
- Founding Chair of the NRHA Rural Medical Educators
- Long term organizer of the Rural Presentation at the annual student resident gathering by the AAFP in Kansas City Bob Boyer was the first AAFP doc of the year and was an outstanding storyteller and illustrated rural values and rural training. I worked with Bob and he did the first half and the second half was segmented by segment of the pipeline early medical school, late, and resident. We had experts in each area interact with them to facilitate the next segment choice. We consistently had the best rated and best attended presentations.
- Long term Editor of Rural and Remote Health, the North American section
- Visiting professor to many programs, medical schools, states, projects, and Japan – the trip to Japan and hosting 2 professors from Japan were high moments for me

Favorite rural location that you have visited in the U.S., and why:

I was always pleased with the Nebraska panhandle visits - Chadron hospital and CHCs and Chadron State speaking engagements and rural managed care project visits. The CHC there taught me about the total community care focus. Also there were flights with the Partnerships for Pediatrics which brought out UNMC peds and mental health to panhandle practices. The rural docs did not need pediatricians. They needed mental health and chronic care help. Visits to top rural hospital administrators were enlightening. These heroes were unrecognized along with their nurses and others. Some hired future health professionals and split their time between shadowing and serving – ideal for health career interest boost. They had few come back to them, but you can bet that many states and hundreds of practices and facilities have benefited.

DRG and other designs have done nothing but make their lives miserable and take away from their ability to care for community members and reach out to them. Hospitals in the red and care is dead. Hospitals in the black help the community fight back. DRGs have closed over 700 rural hospitals and compromised many times this number along with their communities and practices.

[My] favorite single venue was Science and Health Career day at Wayne State with teen Native Americans and their parents. We did hands on – sewing up, pulmonary functions – fun to watch the parents jump in after the kids had their chance. I got to tell them about the first female Native American physician – their ancestor Susan La Flesche Picotte, a daughter of one of the last chiefs. And across the campus with hundreds attending (compared to our dozens attending) – was cheerleader training.

Working with dedicated rural family physicians that developed SERPA – Southeast Rural Physician Alliance, was also a high point (and almost ended my life falling asleep in travel to and from David City.

[A particular] low point was watching eastern Omaha descend into inner city darkness over 15 years. 13% of the population lost all health care insurance when the state cut 50,000 from Medicaid. Schools, business, housing, and other areas failed. Privatization took my patients who were employees of UNMC into laundry and other businesses that abused them, terminated their jobs, terminated their good insurance, and dumped them on to Medicaid and Social Security.

What is one of the most common myths or misconceptions about how to successfully recruit and retain doctors for rural medical practice?

I used to point to getting the resident and spouse involved in the community before, during, and after the visit. We set up venues such as Harmony Grocery meal gatherings and UNMC dinner visits to do this. TN had a 3 day event at Nashville to match up FM residents from 7 states to TN primary care jobs where needed. But these are futile because of the increasing costs. For example, Alaska has to pay 1 more million dollars each year for primary care failure – 10 11 12 13 etc. This translates for about 20 states with similar problems to 300 million more each year diverted from care dollars. Recruitment and retention represent worsening segments of the pipeline. Each segment from preparation to admission to training to practice leaks more and more, and requires more dollars to get less result.

The loss of a rural primary care physician where needed is about \$300,000 in lost revenue and additional costs for recruitment and orientation. This is based on Buchbinder's figures at \$225,000 and updated 15 for years later. Each turnover is about 3 years in frequency. This is \$100,000 per FTE per year – or about 15% of the revenue generated.



Over a decade the usual costs of delivery increase and add over 15%. Also the HITECH to MACRA to Primary Care Medical Home costs since 2008 have been about \$100,000 more per primary care physician or about 15% or more of revenue generated. No business can sustain such increases in the costs of running the business with stagnant revenue as fixed in place by the financial design. This results in fewer and lesser health care team members and a decrease in access, in care, and in caring.

When colleagues reminisce about your role and accomplishments in rural medical education, what do you think they will say?

They will say I had a role in facilitation, particularly in the earlier years. Most disagree with my work regarding the inability of rural medical education to resolve deficits of workforce. They cling to academic beliefs that more graduates or more special program graduates or pipelines can fix the deficits.

How colleagues will reminisce (continued):

There is no indication that we are fixing deficits, particularly as Americans grow older, less healthy, poorer, and are more concentrated where workforce is being killed off – by design.

I believe that those who want to practice where needed should go and experience this great work. But they should know up front that they are not going to be supported. We should not paint a rosy picture until the design has substantially changed not just for a year or two, but with a continued improvement over decades – the opposite of the direction since 1980.

There is nothing better than delivering complex care where most needed when well supported. There is nothing worse than attempting complex care where poorly supported and where patients are poorly supported.

For example, in 1983 I entered solo rural practice in Nowata OK. This was lowest paid primary care boosted by ob and procedures and assistant surgery and ER and hospital and part time teaching (which were all taken away). I was lowest paid in primary care, in Oklahoma, in Area 99 of Oklahoma, and the Reagan administration cut the payments by 15% because I was a new physician. When I moved to Baylor to teach and develop rural programs, I doubled my income to \$66,000 in 1988.

What kind of values have you cultivated and lived by?

We need to be critical thinkers and question what people accept as dogma. Most particularly we should question academic institutions and others who have a vested interest to train more and more graduates aiding them and the financial institutions that profit from debt.

What do you think is one of the most significant events that impacted rural medical education during your career?

The financial design is by far the worst impediment. Underfunded family medicine programs, departments, practices, and activities derive from the sad pittance known as the financial design.

Rural medical educators are also torn. They are wedded to rural communities, sites, practices, and programs – but they are few or one in their programs or departments. Their bosses and colleagues want 100% of their time for revenue generation or academic duties. They usually have to do rural medical education or research or travel on their own time – resulting in 70 – 80 hour work weeks for decades.

My studies of the faculty at UNMC family medicine were revealing. Faculty did much more in more areas than expected. This made it easy to see that other faculty or outsiders would see faculty as doing less, because these duties were unseen. This also makes it more difficult for those whose duties are often outside of the usual department efforts.

How have you dealt with unsupportive leadership in institutions that did not appear to make rural medical training a priority?

Rural medical educators avoid institutions that do not support them. We used to go to other FM departments. I doubt that there are many job openings for us any more.

When support declines and you want to continue rural efforts, you leave. Academic family medicine poorly supports faculty anyway. Often you must leave to get treated better.

Two times I have been the final candidate in national Equal Opportunity Program searches. Both times the position was terminated as support went away from these Departments in two different states. Academic institutions can pretty much do what they want. Laws are relative for them.

In certain states, it is bad. For example I have tried to return to Texas at least 3 times. But support continues to decline for primary care, care where needed, and rural programs. In the early years of family medicine, dollars for FM had to be made line item in legislatures because the medical schools would steal them. Hospitals would steal GME money and not pay FM programs – the ones teaching the residents. Studies had to be done and these abuses exposed to change this.

Many who were leaders in rural medical education have become chairs of FM or various deans. A number of AAFP presidents and docs of the year have been rural docs. This also has not changed the trajectory.

Rural physicians who have become rural medical educators have often left academics because of lack of responsiveness to rural needs.

At Baylor at the beginning of my full time faculty career, rural efforts were taken down by changes in the financial design. St. Lukes Hospital was supposed to pass on 1 million of GME dollars to the residency program that trained the residents. It decided not to do so. New efforts and plans specific to my career and that of others went away overnight. Baylor has long treated FM poorly.

At ETSU the support was best and has remained, although state funding went away and federal funding continues to go to others doing far less for primary care and care where needed. But the leadership of the time did not honor promises to compensate for travel and additional efforts to support and deliver care at rural sites.

Nebraska has perhaps the best pipelines of any. The RHOP programs reached out to teens with various school activities, rural health career fairs, AHEC efforts, work with Cooperative Extension and tribes and more. It facilitated preparation for health care careers and rural admissions with a family medicine led admissions team. The department of family medicine decentralized and established 5 sites across the state to distribute training to 4 rural areas and 1 inner city CHC site. Few did as much as Mike Sitorius and Jim Stageman working with state and rural health leaders in the state. The designs for locums, faculty efforts, and resident efforts resulted in 10 – 15 FTE of rural doc services a year. These were most often supporting the counties most in need.

But I tracked the workforce and this did nothing to increase the concentrations of rural workforce over 15 years of tracking and 25 years of efforts. Sometimes one community would do better and nearby communities worse and vice versa, but not real improvements.

My research demonstrated that UNMC students successful in the rural pipeline as measured by family medicine choice were about 16 times more likely to be found in one of 73 counties in Nebraska in most need of workforce (excluding 14 with no doctor and 6 with higher concentrations for the 93 total, regressions controlling for origins using the AMA Masterfile). The U of Kansas had a 12 times multiplier.

But the Nebraska workforce in these counties remained inadequate with 50 – 60 primary care physicians per 100,000 not subtracting for part time, retired, or having left already.

The financial design actually worsened with stagnant primary care payments and fewer on Medicaid.

We should pay attention to the result for a state or type of county or vast regions of the nation or half of the population with half enough generalists and general specialists – by financial design.

Who were your mentors and how did they impacted your career?

Tom Bruce wrote Improving Rural Health and established superior Arkansas decentralized training with rural programming and research. This was my model for work as a rural medical educator. I read this during rural practice:

https://www.amazon.com/Improving-Rural-Health-Initiatives-Academic/dp/0914546538

Arkansas remains far behind.

Forrest Lang was a rural mentor. He was Philadelphia origin and then an NHSC volunteer before the NHSC scholarships or other incentives. He fell in love with Appalachia and established the Appalachian Preceptorship and ETSU Rural Programs. He invited me to do rural presentations at the family medicine student and resident conference (always poorly supported by AAFP). He tried to get state funding for me to be a rural fellowship director. Elaine Hatmaker was able to do this at the state and I was recruited to ETSU for this. I drove across the mountains to Johnson City and was ready to sign a contract after just a few experiences with the land and people. I recruited my wife with a Bed and Breakfast in nearby Jonesborough.

At ETSU I did a HRSA grant to establish the Minifellowship in Rural Family Medicine (this is also how Joe Florence got to ETSU, my replacement). The federal and state funding was also used for rural programs including the Rural High School Career Fair.

Linda Nwosu was the African American coordinator who went out to lily white Appalachia to figure out why the career fair was not doing well. She found out that the rural high school students thought this was for urban kids, they thought they had no chance, and we needed to know the health career person on each campus (principle, vice, science teacher, person in community). Linda made it work and it has continued to take off under Carolyn and Joe. We also sent RME newsletters to 5000 regularly by mail. The minifellow meetings were held at rural oriented FM conferences. We set up time with their best rural speakers while minifellows developed projects. We linked RME efforts across the nation and did research on rural programming across FM programs. Frankly we were one of few HRSA grants to do what these grants were set up to do.

Mentors (continued):

A best Mini-fellowship moment was time with **Eva Salber.** She was a South African physician and author who worked with COPC and Kark there and in Israel. She moved to Boston and did CHC efforts and did research involving smoking and teens. She moved to North Carolina and helped with African American health care involving church based activities and did studies.

https://fmch.duke.edu/education/eva-j-salber-award-projects-community-health

You can see her influence in my publications such as:

http://www.ruralmedicaleducation.org/community_driven_JRH.htm

Also our Community Connections work in Nebraska with NHSC placed MD NP and PA students with rural community mentors to do COPC projects of and by and for rural communities.

Other influences are seen in **Fitz Mullan, Barbara Starfield, Joe Hobbs,** and some others.

http://www.ruralmedicaleducation.org/facil/research/authors/Hobbs_Invisible.htm

Some in academics have exhibited awareness regarding basic health access needs (http://www.ruralmedicaleducation.org/season_of_accountability.htm) but even a few leaders rising to the top have not had influence.

My respect remained for these authors and their works, but the works often distracted from true solutions for communities in need or health access.

Sadly I have done my part. https://pubmed.ncbi.nlm.nih.gov/9568500/ Fam Med. 1998 Apr;30(4):288-92. Family practice **residency programs** and the graduation of **rural** family physicians. **Bowman** RC(1), **Penrod** JD. by RC Bowman - 1998

Later I would understand the self selection bias of those choosing such training and family medicine training which are factors that influence the outcomes. Like many outcomes studies, this study lacks the proper controls and consideration of other factors such as financial influences. Once again rural training is more specific, but not necessarily a solution for shortages.

Mentors (continued):

Many point to the 2010 reforms as a solution. But most Americans have faced worse because of these so-called reforms. Obamacare works for those who have concentrations of workforce but fails places, practices, and populations where workforce is lacking.

https://www.linkedin.com/pulse/why-most-americans-should-not-celebrate-1 O-years-obamacare-robert-bowman/

You have to understand the places, people, and populations with deficits to gain awareness. This awareness will also indicate why Readmission penalties, pay for performance, and value based designs as well as Star Ratings – are discriminatory.

https://www.linkedin.com/pulse/characteristics-2621-counties-lowest-health-care-workforce-bowman/

To understand failure in primary care, you need to understand failing finances, failing Standard Primary Care years across workforce levels (failed primary care delivery capacity), and failing primary care workforce across all sources.

https://www.linkedin.com/pulse/declines-primary-care-spending-only-tip-ice berg-robert-bowman/

The families of family medicine and the Graham Center have been resistant to our RME led efforts to focus on finances dating back to 2001. Our initial design for what became the Rural Medical Educators was a Doctors Ought to Care activist plan. DOC targets tobacco, alcohol and other marketing excesses. We wanted to expose the medical schools, states, and plans that failed to support workforce where needed. We met with AAFP and STFM and NRHA. AAFP sent a 4th level staff person doing IT. She could not really say much or offer much. We met at the AAFP at the Emerald Palace and those who could attend were there, but did not. STFM was represented by the exec of the time, Roger Sherwood. He could offer no more than STFM Group support – which had done nothing for many years. NRHA did not say much but Donna had me follow her downtown to NRHA and we crafted a staff person and an annual meeting – which still exists. But we did not greatly expand or presence or advocacy or develop the data needed. The focus remains on the training component and not the financial design.

Mentors (continued):

Until the designers understand those most behind and their health care delivery (or lack thereof), there will be worsening impacts of their designs.

Continued reminders of failures where Americans need help. Bolivar County Mississippi was the site of one of 2 first Community Health Centers. It remains far behind after 60 years.

https://features.propublica.org/diabetes-amputations/black-american-amputation-epidemic/

I respect **Fitzhugh Mullan** and others pushing these various CHC efforts and primary care efforts and the Beyond Flexner movement. I consider their work to be distractions from true health reform that must involve a financial design change.

Starfield and others did research involving primary care influences on outcomes that have been overemphasized such that the focus became more primary care rather than necessary improvements in the population to actually improve outcomes. Correlation is not causation and the early Starfield work acknowledged that. The current financial design shapes fewer and lesser team members, not more and better. This is worst where most Americans are found and have inherently the worst outcomes along with least local workforce, least local health care dollars, and least social support resources.

We need mentors that shape differences for most Americans, including their health care. More of the same will not work – as it has not worked.

During your time as a rural medical educator, what is your most humorous memory?

Byron Crouse presenting me with a long and complex scroll at a rural meeting representing my long and complicated ramblings.

During your career, how have you dealt with insufficient funding/resources?

Too many hours doing it myself.

Imagine that you are gifted 50 million dollars for rural medical education. How would you spend this money to achieve the greatest impact on addressing rural medical workforce shortages?

50 million is a drop in the bucket. RME does not work to resolve shortages. The nation needs hundreds of billions more dollars reinvested in primary care with a stacking toward where most needed.

The 60,000 physicians in 2621 counties lowest in health care workforce in 2008 had 38 billion to invest in primary care delivery each year. This was about a billion for each percent of the US population. Revenue to these counties for primary care has not improved much. The cost of delivering primary care has gone up by 1 billion a year as dictated by HITECH to MACRA to PCMH at only 30% able to integrate these. The usual costs of delivering care go up by 1 to 1.5 billion a year. This does not include declines in local population finances or restrictions now placed on care and access.



When you go from 38 billion to invest down below 30 billion, you can only shrink primary care. The US now has about 43% of the population in these counties with even more millions due to growth. Do the math to figure out how more and more Americans get less and less – by design.

This results in fewer and lesser team members, not the more and better that are constantly promoted as solutions for patient centered care, high functioning primary care, primary care medical homes, and value based care.

Thinking back on your career, what 3 organizations have had the most influence on your ability to succeed?

For my first 2 decades, the rural and family medicine organizations and related government interactions facilitated my growth and understanding. I felt that there was always a Tom Rickets or Tom Rosenthal or Tom Rauner or David Palm or Keith Mueller or Gerald Doeksen that would give me a hand to boost me up. This appears to have ended.

Influential organizations (continued):

There once were state representatives and Congress members that would pay attention. They were voted out of office (or fail to try).

I have had experiences as an AMA delegate, as an invited representative to government efforts, and as a family physician and educator. The contacts across these areas are too numerous to count and my focus on basic health access has been consistent. I see the current pathway to health care leadership filtering out a focus on people in most need of care via academic, institution, corporation, and foundation influences.

The internet and constant promotions of meaningless use fuel more dollars for the consultants, corporations, and CEOs that do not deliver care – leaving even less dollars for practices, hospitals, communities, care, and caring – particularly where most needed.

AAFP is a primary example. I remain a member only to continue to remind AAFP leaders of their failures and the need to subjugate all other activities and expenditures except those specific to meaningful health care revenue improvements. Their support of meaningless use should have long ago been terminated.

Commonwealth and other foundations support insurance expansion of the plans worst for most Americans and the fewer who remain to serve them. The 2621 counties lowest in health care workforce did not lack for health insurance. This 40.2% of the population had 40.6% of the uninsured before Obamacare. They did not lack for insurance more than others in America, they just had the worst plans. Concentrations of poor, elderly, Veterans, disabled, and those with the worst private insurance plans and high deductible plans will do this. And these all shape lower levels of health care workforce by their financial designs.

What advice or recommendations for the RME group do you have for addressing physician shortages in rural America for the 21st century?

No promise by any academic or rural leader should be given that any health professional training intervention can address deficits – until the financial design is substantially changed.

The 75% of the rural population in most need of basic health access care needs about a doubling of revenue to support twice as many team members in local practices – the appropriate treatment to remedy the current situation where there are half enough generalists and general specialists. The same is needed for 32% of the urban population in counties lowest in health care workforce.

I doubt that RME will fully support my recommendations because they indicate that training interventions cannot work. We can prepare MD DO NP and PA for rural practice better, but we need a financial design that supports more of them and better team members. It is not fair to promote RME without a substantial increase in the support of Community Based Medical Education.

There is a medical education model that would work. This is the exact opposite of the current medical education model with the wrong origins, preparation, admissions, and training. This would be a model where the origins, preparation, admission, training, and an 8 year obligation were all local.

This is a community based medical education design. Teens and young adults would qualify by working local COPC and other projects (Community Connections, Nebraska). This is also preparation for a serving career (not standardized testing and science focus).

Those who work well in teams and demonstrate their ability to be change agents are selected for training. They train for 8 years locally - basically college, med school, and FM residency. They owe 8 years of service. They save local practices \$100,000 per fte per year in recruitment, retention, and other turnover costs.

Since they know the local system and people, they are even more valuable. They enjoy the benefits of local health workers reaching out in the community and local homes. They remain locally or in similar locations after practice (based on Jicci in Japan). They are likely to marry locally and have almost entirely local friends and contacts. The dollars for health care stay locally and are invested in local health care.

But then someone would have to understand all of the above and more to see why this would work, and improve local community dollar flow, economics, and outcomes.

Any additional comments:

In my blogs I often am critical of academic institutions. They do oppose the true payment reform that would restore generalist and general specialty practices where most Americans most need care. But they also make some contributions to rural medical education and addressing shortages.

https://www.linkedin.com/pulse/what-c an-rural-medical-educators-do-ivory-to wers-robert-bowman/



Ray Christensen, M.D. Minnesota

Birthplace: Valley City, North Dakota Hometown: Centuria, Wisconsin High School: Unity High School, Balsam Lake, WI

Undergraduate College/University: Wisconsin State University-River Falls, WI.

Major: Agricultural Chemicals **Graduate School:**

University of Wisconsin, Madison, WI, MD 1971

Internship:

St Mary's Hospital, Duluth, MN 1971-1972 Name and affiliation of key Rural Program(s) that you have developed or sustained?

University of MN Duluth preceptor and Twin Cities RPAP preceptor. Also, precepted for other health provider schools in and out of MN.

Favorite rural location that you have visited in the U.S., and why: No favorites; [I] enjoy all rural areas,

No favorites; [i] enjoy all rural areas especially northern latitudes and Alaska.

As of 2020, how long have you been in rural education?

38 years

All med students need a rural experience.



Christensen 26

What is one of the most common myths or misconceptions about how to successfully recruit and retain doctors for rural medical practice?

That you can buy them.

When colleagues reminisce about your role and accomplishments in rural medical education, what do you think they will say? Hopefully dependable, competent, and trustworthy

What kind of values have you cultivated and lived by?

Share success, accept failures. Provide Health Care Access for rural citizens and visitors. Teach those who will follow.

What do you think is one of the most significant events that impacted rural medical education during your career?

Moving from my GP goals and days to the formation of Family Medicine Residencies. Solidifying rural EMS, which benefits every individual.

How have you dealt with unsupportive leadership in institutions that did not appear to make rural medical training a priority? This has not been a problem.

Who were your mentors and how did they impacted your career?

Rural Preceptor Year four UW Med School in Westby WI. Other preceptors in WI and at St Mary's Hospital, Duluth, MN. Hospital Administrator in Moose Lake, MN

During your career, how have you dealt with insufficient funding/resources?

Kept working.

Imagine that you are gifted 50 million dollars for rural medical education. How would you spend this money to achieve the greatest impact on addressing rural medical workforce shortages?

Find a mechanism to pay rural preceptors maybe 0.2 level and appointing them U Faculty. Provide Preceptor Training and Evaluation program.



Thinking back on your career, what 3 organizations have had the most influence on your ability to succeed?

National Rural Health Assn. Local Hospital and community. Clinic which we founded.

What advice or recommendations for the RME group do you have for addressing physician shortages in rural America for the 21st century?

All med students need a rural experience. We also need to write 2 or 3 graduation criteria that apply only to rural and require a rural rotation.

Any additional comments:

Our obligation is to provide care at the national level in our communities and if we cannot the patient needs referral to that level. In going to Moose Lake I realized my level of care was dependent on my partner and vice versa. Our trust in each other extended far beyond practice.

Christensen 27



Mark Deutchman, M.D. Colorado

Birthplace: Akron, Ohio Hometown: Akron, Ohio

High School: Firestone High School,

Akron Ohio

Undergraduate College/University:

The Ohio State University.

BS Zoology 1972

Graduate School:

The Ohio State University. MD 1975

As of 2020, how long have you been in rural education?

30 years

Name and affiliation of key Rural Program(s) that you have developed or sustained:

- OB Fellowships at the University of Tennessee and at University of Colorado Departments of Family Medicine
- Rural Track at University of Colorado School of Medicine

Favorite rural location that you have visited in the U.S., and why:

28

Mt. Adams in Washington State because of the abundant wild-flowers and waterfalls.



Deutchman

We are born pure and free to choose our own actions and are personally responsible for them. We must participate in completing the task of creation; this means that we should leave the earth better than it was when we entered it.

What is one of the most common myths or misconceptions about how to successfully recruit and retain doctors for rural medical practice?

The most common myths that I combat are that rural physicians are isolated, underpaid, overworked and not as smart as those in urban areas.

When colleagues reminisce about your role and accomplishments in rural medical education, what do you think they will say? I hope to be remembered for being a skilled, conscientious, compassionate physician and a dedicated teacher.

What kind of values have you cultivated and lived by?

My values are guided by these principles of the Jewish faith that I was born into: We are born pure and free to choose our own actions and are personally responsible for them. We must participate in completing the task of creation; this means that we should leave the earth better than it was when we entered it. We should treat others as we would like to be treated.

How have you dealt with unsupportive leadership in institutions that did not appear to make rural medical training a priority? Continue speaking the truth and exercising

advocacy while waiting for them to die or move away.

Who were your mentors and how did they impacted your career?

Dr. Bill Sammons, a Family Physician in rural Oregon who took me into his practice and his family for a clinical rotation when I was a third year medical student and modeled full scope Family Medicine and lifelong learning.

During your time as a rural medical educator, what is your most humorous memory?

My most humorous memory was a medical school Dean who boasted hiring a "primary care ophthalmologist" who was interested "in the whole eye, not just the cornea or retina." Believe it or not, that is a TRUE story.

During your career, how have you dealt with insufficient funding/resources?

By working hard, being frugal and not complaining.



Imagine that you are gifted 50 million dollars for rural medical education. How would you spend this money to achieve the greatest impact on addressing rural medical workforce shortages?

I would create a comprehensive program to educate rural communities, rural hospital CEOs and their boards on a business plan focused on hiring a sufficient supply of full-scope Family Medicine physicians who can cover medical practice more efficiently and cost-effectively than by hiring a variety of limited-scope physicians. The resulting cost savings can be used to increase hiring of full-scope FPs, and decrease individual workload thus creating more incentive for students to enter rural Family Medicine.

Thinking back on your career, what 3 organizations have had the most influence on your ability to succeed?

The AAFP and my immediate family.

What advice or recommendations for the RME group do you have for addressing physician shortages in rural America for the 21st century?

We need to become more active and influential in the admissions process to healthcare professional training programs including but not limited to schools of medicine. What goes in strongly influences what comes out, so more rural-origin students need to be admitted to these programs since we know that rural origin is a strong predictor of rural practice. The programs also need rurally-knowledgeable and rurally-credible role models and teachers who will encourage rather than discourage the students interested in rural life and work. Similarly, all health professions students should receive rural experience during training because some will be attracted to rural life and work through that experience.

Deutchman 29



Lisa Dodson, M.D. Wisconsin

Birthplace: Portland, Oregon Hometown: Bozeman, Montana High School: Bozeman Senior High School

Undergraduate College/University:
Lewis and Clark College, Biology, BA
Graduate School:

State University of New York at Stony Brook, MD

As of 2020, how long have you been in rural education?

Name and affiliation of key Rural Program(s) that you have developed or sustained?

- 1. Oregon Rural Scholars Program at Oregon Health Sciences University
- Medical College of Wisconsin-Central Wisconsin Regional Campus

Favorite rural location that you have visited in the U.S., and why:

John Day Fossil Beds in eastern Oregon. The scenery is desolate and beautiful with painted hills and vast landscapes and sky. Plus, dinosaur fossils! (Minus, rattlesnakes)



Dodson 30

What is one of the most common myths or misconceptions about how to successfully recruit and retain doctors for rural medical practice?

The older literature indicates that men are more likely to go rural and sustain rural practice, but my experience is that well-structured rural practice is perfect for women as well.

When colleagues reminisce about your role and accomplishments in rural medical education, what do you think they will say?

I hope that they will say that I demonstrated a lifelong personal and professional commitment to the health of rural communities, and to creatively educating students and residents for rural practice. They might say "single-mindedly" and that would be ok too!

What kind of values have you cultivated and lived by?

One of my early rural mentors, Dr. JS "Dutch" Reinschmidt, told me to "go where you are needed and do what you love and you will never have to worry about how your life will turn out". That has served me pretty well as a motto.

What do you think is one of the most significant events that impacted rural medical education during your career?

Right now, I would have to say COVID-19, something that I never would have even imagined a few months ago. Aside from COVID, I think we have seen an ability in rural areas to overcome some of the marginalization of medical students that has occurred in medical schools and urban areas. Rural places tend to put everyone to work at the maximum of their ability and training, whereas students have been increasingly pushed to the margins in more urban settings.



How have you dealt with unsupportive leadership in institutions that did not appear to make rural medical training a priority?

A consistent message, focusing on the needs of rural communities and the obligation of medical schools to create doctors to serve our entire population has been helpful. However, you have to be realistic and recognize when there is no road forward in some cases. I had to change institutions at one point due to a failure of institutional leadership to continue to carry out a well-established mission toward rural training. It was a tough decision, but banging your head on a wall too long just makes a mess and doesn't move the wall.

Who were your mentors and how did they impacted your career?

JS "Dutch" Reinschmidt, MD and **John Saultz**, MD, both consummate educators, influenced my decision to go into rural practice, and take residents and students with me. **Scott Fields**, MD gave me the courage to get C/section trained in order to safely practice in a frontier area.

LJ Fagnan, MD showed me the joy and versatility of a long rural career. My rural practice partners, Bob Holland, MD, Jack Jackson, MD and Pam Chapin, MD demonstrated unwavering support and gave direct feedback when needed. Leland Spaulding, MD for helping me become a better surgeon.

Jim Boulger, PhD and many other RME colleagues for being a sounding board and giving me strength to "fight the good fight". And the many students, especially the Oregon Rural Scholars students, who made it all worthwhile.



During your time as a rural medical educator, what is your most humorous memory?

I got a call early one morning from a resident who said that there as a "stampede" outside of the house that the residents lived in while on rotation. I realized I had forgotten to warn her that a local rancher was moving cattle to spring feeding grounds that morning. I assured her that a few hundred head of cattle being herded calmly through town did not constitute a stampede, and that I'd meet her at the hospital after they passed by.

During your career, how have you dealt with insufficient funding/resources?

Learn to be frugal, pay attention to the things that actually make a difference in people's lives, and learn to fight like hell for what you need.

Imagine that you are gifted 50 million dollars for rural medical education. How would you spend this money to achieve the greatest impact on addressing rural medical workforce shortages?

Develop and reward rural faculty!
Provide meaningful financial and educational support for those hard-working rural docs in the trenches.

Thinking back on your career, what 3 organizations have had the most influence on your ability to succeed?

- 1. Rural Medical Educators
- 2. STFM
- 3. Oregon AHEC

What advice or recommendations for the RME group do you have for addressing physician shortages in rural America for the 21st century?

- 1. Who we admit to medical school matters more than almost anything else. Infiltrate your medical school admissions committees with those who understand the mission and believe in truly holistic admissions processes.
- 2. Support the faculty who teach in our rural settings.
- 3. Provide high quality, longitudinal rural experiences to students with the aptitude and attitude necessary for rural practice.

Dodson 32



Jay Erickson, M.D. Montana

Birthplace: Litchfield, Minnesota Hometown: Litchfield, Minnesota High School: Litchfield High School

Undergraduate College/University:
St. Olaf College, Chemistry, BA
Graduate School:

UMD/University of Minnesota School of Medicine MD, Spokane Family Medicine

As of 2020, how long have you been in rural education?

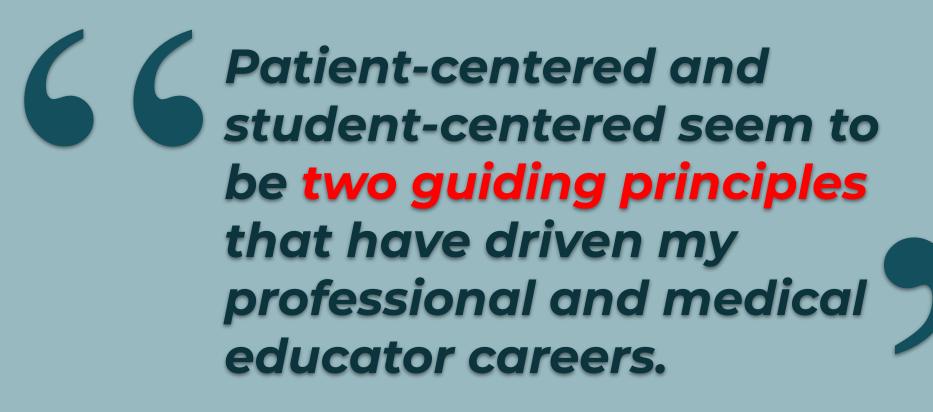
30 years

Name and affiliation of key Rural Program(s) that you have developed or sustained:

- Faculty and site director Family Medicine Clerkship-30 years, UWSOM.
- WRITE WWAMI Rural Integrated Training Experience (Our LIC) 16 years
- UWSOM Director 2006-2017
- MT director 2004-present.
- TRUST Targeted Rural Underserved Track, 12 years, Founder and MT director 2008-present.
- 2004 Assistant Dean for Regional Affairs, Assistant Clinical Dean, WWAMI Montana

Favorite rural location that you have visited in the U.S., and why:

I live off grid just outside of Glacier Park and 20 miles from the Canadian border. I am surrounded by the Flathead National Forest and my nearest neighbor is a mile away and I am a certified tree farmer. I love the remoteness and beauty of living in the mountains, except when we get 60 inches of snow in 10 days like happened this past January.



Erickson 33

What is one of the most common myths or misconceptions about how to successfully recruit and retain doctors for rural medical practice?

Rural doctors make less than their urban counterparts. Rural physicians are well reimbursed in their practices.

When colleagues reminisce about your role and accomplishments in rural medical education, what do you think they will say? Jay built a strong connection of learning communities throughout Montana with programs focused on training for rural and underserved practices. We have about ¼ of Montana physicians who teach and have

What kind of values have you cultivated and lived by?

faculty appointments at UW.

In my practice I have always focused on patient centered care and putting my patients first when thinking about the big picture of medicine all the way to caring for the individual patient. In medical education I have been student centered and always tried to make decisions about medical education that put students first. So, patient-centered and student-centered seem to be two guiding principles that have driven my professional and medical educator careers.

What do you think is one of the most significant events that impacted rural medical education during your career?

I think attending UMD and participating in the RPAP program gave me a great understanding of well developed rural medical education programs. So, when I became the Assistant Dean for Regional Affairs and Assistant Clinical Dean, Montana WWAMI in 2004 and began to develop a framework for a rural medical education within the Montana WWAMI program, I had good roots to help develop Montana programs. Also developing a collegial relationship with my rural medical educators from around the country with the RME group at NRHA and the international LIC educators at CLIC Consortium of Longitudinal Integrated Clerkships.



How have you dealt with unsupportive leadership in institutions that did not appear to make rural medical training a priority?

Maintaining a wide web of relationships is important in working with a wide variety of educators at a large academic institution. Continuing to have communication pathways with these relationships on a regular basis Sometimes you just have to wait for change in leadership to accomplish your goals (-:

Who were your mentors and how did they impacted your career?

Tom Norris - medical educator at UWSOM, department chair, Vice Dean for Academic Programs at UWSOM. Great role model for leadership and affecting change. Amazing colleague who with I co-directed the WRITE program. Emphasized quality in medical education and amazing leader who constantly demonstrated key leadership principles

John Coombs - medical educator at UWSOM, Vice Dean for Regional Affairs at UWSOM. Again, an amazing leader who demonstrated great leadership principles. When I started the TRUST program at UW, he encouraged me to do the right thing for rural medical education in Montana and later ask for forgiveness.

During your time as a rural medical educator, what is your most humorous memory?

Sitting around a campfire and hearing our rural TRUST students fiddle, play guitar and sing songs. That was a very talented class and a great memory.

Erickson 34

Jay Erickson, M.D.

During your career, how have you dealt with insufficient funding/resources?

I am a Family Physician and a problem solver. So, dealing with insufficient resources is something I deal with clinically all the time with my patients. So, in dealing with insufficient funds/ resources in rural medical education I am always good at partnering and finding resources. I was able to obtain a direct line of funding for our MT TRUST program, which allows funding for a TRUST director, faculty development, student travel and TRUST bling within Montana.

Imagine that you are gifted 50 million dollars for rural medical education. How would you spend this money to achieve the greatest impact on addressing rural medical workforce shortages?

I would use the money to offer development grants for schools to initiate rural programs. I would continue to use this money to catalog the current rural programs available throughout the US. I would use this information to develop resources for best practices. Maybe model this along the model of RTT technical grants that walked alongside programs to help develop new RTT training sites.

Thinking back on your career, what 3 organizations have had the most influence on your ability to succeed?

NRHA-RME Rural Medical Educators CLIC-Consortium of Longitudinal Integrated Clerkships RTTC-Rural Training Track Collaborative

All 3 of these organizations have offered me a glimpse into a variety of rural medical education programs which I have utilized to help develop an effective rural medical education program for our state and region. The relationships and colleagues that I have developed have been immensely important in sharing and supporting me on my rural medical education journey.

What advice or recommendations for the RME group do you have for addressing physician shortages in rural America for the 21st century?

Continue to be an advocate for rural medical education by being an advocate for change in your state and region.

- 1. Be involved with admissions so that you are admitting the correct cohort and advocating for rural and underserved applicants
- 2. Offer as many rural opportunities for students as possible
- 3. Offer a rural LIC experience as the continuity and longitudinal experience in a rural setting is key for developing a rural workforce
- 4. Create a comprehensive rural medical education program that wraps around students for all 4 years of medical education. We developed TRUST in WWAMI which starts with focused admissions, a TRUST cohort which has an enhanced rural curriculum, connection with a unique rural community for a longitudinal continuity medical education experience in this community, focused rural curriculum, travel to state, regional and national meetings, focused career guidance in a rural focused career, connection post residency for recruitment and retention.
- 5. Recruit your rural graduates back to your state to your teaching sites to train the next generation of rural physicians.

Erickson 35



Joseph Florence, M.D. Tennessee

Birthplace: Norfolk, Virginia Hometown: Norfolk Virginia High School: Lake Taylor High School (1970)

Undergraduate College/University: Duke University, Chemistry and Religion, BA (1974)

Graduate School:

- Virginia Commonwealth University, MS Biology (1976)
- Medical College of Virginia (Virginia Commonwealth University), MD (1980)

As of 2020, how long have you been in rural education?

37 years



Name & affiliation of key Rural Program(s) that you have developed or sustained:

- National Health Service Corps scholar serving Ary, KY – Homeplace Clinic.
 1983-1985. The first month after I arrived, the doctor, who recruited me there, left. Homeplace clinic was a small rural primary care center affiliated with Family Health Services, the clinical enterprise of the Appalachian Regional Healthcare group. I started having medical students spend month long rotations with me from University of Kentucky and University of Louisville.
- Appalachian Regional Healthcare –
 Director of Family Health Services. (June
 1984-1990) Family Health Services was a
 multispecialty, interprofessional group of
 docs from FM, Peds, IM and OB-gyn and
 included nurse practitioners and
 pharmacists. Most of the doctors were NHSC
 docs with 2 year commitments. The group
 was very pro medical education and enjoyed
 teaching medical students and nurse
 practitioner and midwifery students
- Center, Medical Director, Hazard-ARH
 Regional Medical Center, Hazard, KY (July
 1987 January 1991); Assistant Director,
 Health Professions Education, Hazard
 Appalachian Regional Hospital, Hazard, KY
 (November 1984 June 1987). The SE Ky
 AHEC was part of the KY AHEC System,
 administered by the University of Kentucky,
 was started in 1984. I was one of the original
 members of this team.

Southeast Kentucky Area Health Education

Florence 36

Key Rural Programs (continued):

- University of Kentucky Center for Rural Health. I was one of the original team members of this Center. In this capacity I was responsible for the development, accreditation and direction of the East Kentucky Family Practice Residency Program, Hazard, Kentucky. (1991-2002) as well as the direction of Clinical Programs, UK Center for Rural Health, East Kentucky Family Practice Clinic (1991 – 2002). While at the UK Center for Rural Health I became tenured Associate Professor faculty and Vice-Chair University of Kentucky Department of Family Practice – East Kentucky Division 2002
- Pikeville School of Medicine Administrative Director of Medical
 Education East Kentucky Internship
 Program for the Appalachian OPTIC East
 Kentucky Family Practice Residency,
 August 2000 2002
- East Kentucky Veterans Center, (120 bed nursing home) Medical Director, Hazard, Kentucky, 2002
- Mountain Community Hospice, Medical Director, 1996 2002
- East Tennessee State University:
 - Quillen College of Medicine,
 Department of Family Medicine, Director of the Division of Rural Programs, 2002 2010
 - Quillen College of Medicine, Academic Affairs, Director of Rural Primary Care Track, 2002-Present;
 - Interdisciplinary Curriculum
 Committee: Division of Health Sciences, member 2002 – 2004; chair 2004 –2015
 - Remote Area Medical Clinics –
 Volunteer physician and supervisor of medical students and residents since 2004.
 - Body and Soul Mission Clinic, Roaring Creek, Belize; provided medical direction/ supervision to medical student and residents caring for this community of patients.

Favorite rural location that you have visited in the U.S., and why:

My favorite was Perry County, KY, where I learned to love rural as a place to work and live and raise my family.



What is one of the most common myths or misconceptions about how to successfully recruit and retain doctors for rural medical practice?

MYTH: It's easy to recruit and retain doctors for rural medical practice.

REALITY: It takes more than just the "village" to recruit and retain doctors for rural medical practice.

When colleagues reminisce about your role and accomplishments in rural medical education, what do you think they will say? He was passionate about rural.

What kind of values have you cultivated and lived by?

Service and Faith and Family.

What do you think is one of the most significant events that impacted rural medical education during your career? Establishment of RME Group within the NRHA.

How have you dealt with unsupportive leadership in institutions that did not appear to make rural medical training a priority?

Perseverance; resilience, out-lasted them.

Florence 37



Who were your mentors and how did they impacted your career?

- Eli Boggs, MD (Hazard, KY) one of the "fathers of family medicine" in Central Appalachia
- **Grady Stumbo, MD** (Hindman, KY) taught me aspects of the politics of medicine and role politics can play to improve health and healthcare
- Sister Virginia Farrell, M.M., Maryknoll Sister, RN, introduced me to hospice and palliative care
- Wayne Myers mentored administrative academics with rural perspective and shared experiences
- Bob Bowman brought me together with like-minded folks via the ETSU Rural mini-fellowship.
- Tom Townsend, MD understanding of rural ethics
- Jim Boulger mentored patience, persistence and perspicacity

During your time as a rural medical educator, what is your most humorous memory?

Call at 3:00 AM – "Ferd's drunk again, doc! What are **YOU** going to do about it."

During your career, how have you dealt with insufficient funding/resources?

Made it work with what was given.

Imagine that you are gifted 50 million dollars for rural medical education. How would you spend this money to achieve the greatest impact on addressing rural medical workforce shortages?

Endowment funding for Rural Medical Education – occurring in rural communities, by rural faculty, serving/caring for rural people.

Thinking back on your career, what 3 organizations have had the most influence on your ability to succeed?

- UK Center for Rural Health/ Appalachian Regional Healthcare
- East Tennessee State University, Rural Programs
- Rural Medical Educators Group, NRHA

What advice or recommendations for the RME group do you have for addressing physician shortages in rural America for the 21st century?

Promote presence – BE in Rural. Live and Work in Rural Communities; Place students to live and train in rural communities. Help develop systems of care which provide work places in rural communities for physicians in rural communities (put resources in rural).

Florence 38



Matt Hunsaker, M.D. Wisconsin

Birthplace: Illinois

Hometown: McHenry County High School: Crystal Lake

Undergraduate College/University: Milligan College, Biology; Chemistry minor

Graduate School: University of Illinois, M.D.

As of 2020, how long have you been in rural education?

20 years

Name and affiliation of key Rural Program(s) that you have developed or sustained:

- University of Illinois Rural Medical Education Program
- Consultative role to a number of US Medical Schools
- Princess of Naradhiwas Faculty of Medicine, Thailand

Favorite rural location that you have visited in the U.S., and why: Smoky Mountains, beauty and climate



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What is one of the most common myths or misconceptions about how to successfully recruit and retain doctors for rural medical practice?

That high salaries alone will lead to long-term retention.

When colleagues reminisce about your role and accomplishments in rural medical education, what do you think they will say?

Intense, direct, friendly and loyal. Provided knowledge, advice and tools freely to others; particularly people building new programs or re-building existing ones. Hosted and promoted the work of others.

What kind of values have you cultivated and lived by?

Strongly committed to completing achievements to which I am dedicated and I will give all that I have to succeed. I also learned as a youth, leadership, and to attempt audacious goals, and accept non-traditional opportunities if they were meaningful to me. Independence of thought and confidence in pioneering new ideas have all served me well.

What do you think is one of the most significant events that impacted rural medical education during your career?

The move toward a more formal group of medical educators focused on sharing ideas and publishing data and outcomes about methods and strategies for rural retention success (RME).

How have you dealt with unsupportive leadership in institutions that did not appear to make rural medical training a priority?

Build external frameworks of stakeholders to ensure the **outcomes** were recognized and valued by stakeholders that possessed financial control (legislators), social validation of university mission (rural communities), and at times unyielding, aggressive, persistence (medical school leadership has a typical 5-10 year turnover) outlast short-sighted leaders.



Who were your mentors and how did they impacted your career?
I was profoundly influenced by rural doctors who were peers in practice. We often had difficulty recruiting talented, young physician to replace retiring doctors. We knew what we wanted and needed to sustain our rural practices.

At the time appropriate graduates were not choosing rural areas in sufficient numbers. We talked frequently about the problem, and leaders like Howard Rabinowitz at Jefferson and Jim Boulger at Duluth, the John Wheat and Jim Leeper and their team at Tuscaloosa all provided program descriptions, data on what had worked and most importantly had the courage to describe what hadn't worked as well. It formed the database for innovations for my early work at Rockford.

Hunsaker 40



During your time as a rural medical educator, what is your most humorous memory?

I have many. A number of them revolve around housing or perhaps better characterized as the occasional lack of ideal housing while traveling in rural areas. On one particular occasion I was scheduled to speak at a medium-sized gathering on a Saturday morning about our rural programs and the event was a farm breakfast.

The host arranged my overnight stay as I was to speak at 6:30am. He thought he could do me a favor by offering the hunting camp bunkhouse to me as it was only 2 miles from the venue and the closest hotel was about 45 minutes away. I agreed and because of a late arrival, he left the door unlocked and some snacks and soda on the counter. It was a cold November evening and the bunkhouse was warm and inviting. It was late and I quickly retired to bed.

What no one told me was that when you turned off the light switch, the furnace went off too. I was very cold most of the night and didn't sleep well. My host showed up about 6:00am and said, "You must like it really cold when you sleep, I see you turned off the furnace switch"- which also controlled the overhead light and was unlabeled as controlling the furnace. As it was a hunting camp bunkhouse, it also didn't have cell coverage to call for hvac help. It was a cold 4 hours of tossing and turning.

During your career, how have you dealt with insufficient funding/resources?

I often partnered with unusual partners like hospitals and non-rural agencies that had interest in rural physician workforce to partner on funding for AHEC, student housing while on rural rotations, and financial support models for student education costs. Indirect advocacy directed at the university for funding by Agricultural Association, rural co-ops, etc. also pressured internal funding at the university level with arguments that challenged historical outcomes by specialty distribution and geographic distribution.

Imagine that you are gifted 50 million dollars for rural medical education. How would you spend this money to achieve the greatest impact on addressing rural medical workforce shortages?

I would replicate models that work. Preselection for students most likely to return to rural practice and clearly look at a number of non-cognitive factors. Traditional conspicuous achievement metrics for medical school often pre-select away from rural comfort/future practice. I would include early elements of rural practice exposure to enhance identity formation, I would encourage rural placement for clerkships where possible and seek to have 4-6 months of rural-residing learning at a minimum. Providing mentors and connecting practice-entry opportunities are also key functions of a rural medicine program. Continuous evolution of the program is also necessary.

Thinking back on your career, what 3 organizations have had the most influence on your ability to succeed?

- 1) RME
- 2) State Rural Health Assn.
- 3) State Family Medicine Association Willing participants in teaching students

What advice or recommendations for the RME group do you have for addressing physician shortages in rural America for the 21st century?

Avoid a victim mentality and a focus on all of the problems. Create narratives of equity for residents in rural areas by providing high quality healthcare. "If we wouldn't accept rural areas not having clean drinking water; why would we accept not having healthcare?"

Create partnerships and seek community input from the communities you serve and use the strength of rural-based partners to win public opinion, funding and relevance for your medical school beyond the 4-5 county ring where academic medical center influence is felt. Know the medical school leaders and present your value-added case passionately.

Hunsaker 41



Michael Kennedy, M.D. Kansas

Birthplace: Seattle, Washington Hometown: Topeka, Kansas High School:Topeka High School

Undergraduate College/University:

- Arizona State University, Wildlife Biology, BS
- Washburn University, Respiratory Therapy, Certificate

Graduate School:

University of Kansas School of Medicine, Medical Doctor

As of 2020, how long have you been in rural education?

27 years.

Bring humanism back into medical practice and by that I mean the one to one interaction with a meaningful relationship between physician and patient. One of honesty and integrity, a relationship where the patient felt unconditional regard.

I started in rural practice right out of family medicine residency at University of Kansas in Kansas City. I was on the Kansas Medical Student Loan Program and went into Rural Practice in Burlington, Kansas a town of 2,800 in July 1993. I began teaching students in my practice after about a year in practice. Then moved to medical school in 2000 to teach family medicine and later became the inaugural Dean for Rural Health Education in 2005.

Name & affiliation of key Rural Program(s) that you have developed or sustained:

- 2003 Course Director for Introduction to Clinical Medicine, under my direction the course underwent a major transformation and we established the clinical skills lab and PETA (Physical Exam Teaching Assistant) program.
- 2005 Became the Inaugural McCann Professor of Rural Health Education and the first Assistant Dean of Rural Health at KUMC.
- **2005** Became Director of the Senior Rural Preceptorship started in 1951.
- 2006 Establish the Office of Rural Medical Education at KU-SOM and serve as the Director
- 2007 Establish the Rural Medicine Interest Group (RMIG) for students with an expressed rural interest. Became the Director of the RME Network and established the KUMC RME Advisory Council.
- 2008 Member of the NRHA Rural Medical Educators Group, serving as Jr Co-Chair (2010), Sr Co-Chair (2011) and Immediate Past-Chair (2012),

2009 – Served as Steering Committee Member and Chair of the Clinical Group for the State of Kansas e-Health Advisory Council to develop a state-wide strategy for establishing a health information exchange with emphasis on rural practice engagement.

2010 – Expand and renew the Rural Option for third year Clerkships (ROC-3) in Family Medicine, Surgery, OB/GYN, and Pediatrics.

2011 – Part of the team to establish the Branch Campus 4-year Medical School in Salina, KS. The smallest rural branch campus in the US with 8 students. Now in its 10th year. The last graduates all matched in family medicine.

2012 – Summer Training Option for Rural Medicine (STORM), became the Director and we did a course revision with renewed student rural research opportunities and expansion to more frontier teaching sites.

2014 – Co-Founder of the AAFP Rural Health Member Interest Group.

2015 – I established the Kansas Rural OB Access Task Force to examine access to OB/maternity care in Kansas

2018 – Established the Kansas Medical Student Loan Policy Committee

2018 – Establish a rural international medical education program in San Pedro La Laguna, Guatemala.

2019 - Became the Director of the Scholars in Rural Health Program. Minor revision with increased enrollment and refocused the program to reinforce rural primary care.

2019 – Invited to establish the Rural Health Equity Fellowship with the AAFP/NRHA.

What is one of the most common myths or misconceptions about how to successfully recruit and retain doctors for rural medical practice?

I think one of the most common myth is that the only way to find people willing to go rural is to recruit rural people. There are many people who embrace rural ideals and rural lifestyle. Many want to escape the rat race of urban settings. There is an adjustment that needs to be made and some expectations by urban people are unrealistic. But I think many urban people fit in well. If rural training is only open to people applying for a rural program or pipeline, then these urban to rural converts would be excluded. And so, my motto really is "Rural by Choice". I think if you can embrace that idea that you can still capture many rural background people who are interested in rural careers.



I also think you can try to avoid rural people who are just looking for a ticket out of their rural situation and taking advantage of their rural background to get into a program that they are not interested in.

Another misconception is that rural physicians make less money. This is not true. In fact, when I was in rural practice I made almost twice as much than in my urban practice. I also wore many hats. It certainly depends on the activities that you were involved in, but I think the opportunities are certainly great in rural settings. I think there is a willingness for rural physicians to work longer hours. But, then that brings up one of the other myths. That is that rural physicians are required to work longer hours. I think that is an area that has been reevaluated in recent years. Healthcare leadership in rural settings is now realizing that physicians need quality time with their family and they need personal time. They now realize that if you cater to having quality time then you'll retain physicians for much longer period of time and doctors are much happier without risking burnout.

When colleagues reminisce about your role and accomplishments in rural medical education, what do you think they will say?

I hope when people look back on my career they will see some advances in distributed medical education. I also hope that they find some of the increased active learning models in medical.



One major highlight is the establishment of a regional campus in Salina. This rural campus involved a lot of collaborative work from a fairly extensive team. I functioned as an integral part of that team. We were very proud to have the Salina program open as one of the smallest non-urban campuses in the United States. The program has been running since 2011 and it is now well established and successful.

The other program that I hope to be associated with it success is the Scholars in Rural Health program in Kansas. Although, I did not start this program (it was started by Dr. James Kallail) I've played a role in the administration and function of the program for many years. Recently, I have accepted the role as the new director. We are very proud of the results of this program, which I think is a model program.

Another significant establishment was the Office Rural Medical Education at the University of Kansas. We started this office in 2007. Since then it has served as a focal point for rural health education in Kansas and we feel that the office has served the medical students extremely well. We are a tri-campus system and the ORME has worked hard to coordinate our efforts across the 3 campuses. One of the concepts that we created to describe our general philosophy is that of a rural train instead of a rural track. We feel that this is an important distinction for students to know that many of our rural programs offer a "safe" way to try out some of the opportunities for rural training without necessarily committing to a rural future.

Some students over the years have found that rural medicine is a calling for them and they have continued on to pursue rural careers. We do have pipeline programs, but they tend to be rigid structures and there is little opportunity for students to join into a pipeline other than at the entry point. Whereas the rural train has an opportunity at every stop; some students will get on.

Lastly, I have been the custodian of the rural preceptorship in Kansas for the last 20 years. This program is 70 years old. It started in 1951. My father coincidentally was in the second class that went for their rural preceptorship in 1952. He had many fine memories as well as many "terrifying moments" in his educational career in rural medicine. He did not choose rural medicine as a career. His choice and the reasons strongly influenced me in the direction I have taken.

One of the core values that I place very high was to try and bring humanism back into medical practice and by that I mean the one to one interaction with a meaningful relationship between physician and patient. One of honesty and integrity, a relationship where the patient felt unconditional regard. I feel like some of the objectivity in medicine has greatly interfered with the issues of trust and confidence in physicians. The first part of my academic career was spent role-modeling this for young physicians and students.

The second major value is rural by choice. I think that you are much more successful if you appeal to the interests of others. I think if you can empower their desire to do the types of activities that they wish to do then you can be very successful. So, I try to identify people who have this underlying belief that they would like to practice rural medicine. Then I go out of my way to try to make that happen. Lastly, I would mention a motto that has held me well but may have caused others significant consternation and that is "build it and they will come". By that I mean that I am ready to jump in and start building the program without any promises that students will sign on. I think there is much that can happen with your level of enthusiasm and your belief that you were doing the right thing. That is contagious. I think students then will follow and connect with the ideal that you set forth. Let them witness the passion that you have for rural medicine and this alone can attract others.

What kind of values have you cultivated and lived by?

All of my life I have lived by a service orientation. My first jobs were service to others through being a handyman. Then in healthcare as a respiratory therapist and finally as a physician. I feel very strongly that you should put the patient first. I am compelled to serve the underserved. Through this interest I have done service during natural disaster, service for Habitat for Humanity and Christmas in October, International mission work, and not only rural medicine but indigent healthcare in urban settings. During each of these activities I invite students to participate. The same skills and desires that drive my work in these areas translates into working as a physician and a leader. I think I have been a positive influence on my students to instill the same values.

What do you think is one of the most significant events that impacted rural medical education during your career?

Very significant event in medicine that impacted rural medical education is the advent of computers in healthcare. I think it has driven a wedge between physicians and their patients. It is the 500 pound gorilla in the middle of the exam room. I think it is terrible how people now are compelled to pay attention to the computer and not the patient sitting in front of them.

It is too attractive for students to pay more attention to the computer (safer) than it is for them to pay attention to the patient and to try to unlearn this behavior in medical education has been a real sticking point for me. However, one of the benefits that I have seen with the EHR (if you can learn to navigate the technology) is bedside decision-making support. One of the problems that physicians have with rural emergency care is that feeling of professional isolation. When you have a significant medical situation such as trauma, heart attack or stroke present to the ER and you only see this a few times per year, then there can be added anxiety when making medical decisions.

Having the ability to talk to someone via telemedicine about the care of the patient and come up with a collaborative plan is one of the recent advances. Physicians without daily experience in this area can really benefit. I think will very much help relieve some of the anxiety that rural physicians have. In addition students will see this as a benefit. Previously students felt that maybe this was a barrier because they didn't feel that they had the skill set to take care of these emergent situations.

One of the things that I have greatly benefited from is the new leadership support that has developed in rural medicine over my tenure at the University of Kansas. When I started in 2000 as a part-time faculty there was much animosity towards primary care and especially towards rural medicine. It was just not "academic" enough. In fact, our department really struggled against some of negative tide against anyone in primary care and in particular family medicine.

There was blatant disrespect that students witnessed and that impacted them in terms of specialty choice. In a very short period of time, with the change in leadership by 2005 an Office of Rural Medical Education was established in the Dean's Office, turning that trend around. It legitimized rural medicine in the eyes of students.

The move was an illustration of the realignment of core ideals. It spoke loudly of the belief that one of the major missions of our medical school was to train doctors for rural Kansas. There was some uphill hauling to try and overcome the years of disrespect in the past, but in 2020 the relationships have never been better.

Currently we are embarking on a new rural health task force to try and align all of medical education and specialties toward a sustainable rural medical education strategy for the future of our students. I would say this has been an extraordinary time at KU. It is continuing to grow. And I really look forward to the future.

Michael Kennedy, M.D.

Who were your mentors and how did they impacted your career?

Dr. John Neuenschwander – When I was a first year medical student I participated in a program called Rural Health Weekend. I went to the small town of Hoxie in western Kansas in a frontier county. Dr. Neuenschwander had been practicing in this town of about 1,500 people as a solo practitioner for 37 years. He was loved by the community. He did everything. Even drew blood from a sheep to make his own sheep's blood auger for strep cultures. I admired him greatly. I wanted to practice like he did. I wanted a broad scope of practice on the prairie in a town that loved him. Even though I only spent 4 days with him it left a lasting impression. I touched bases with him over many years that followed and found great value in his mentorship.

Jim Boulger – I found a fast friendship in this fellow rural medical educator. But, Jim has a warm style. He frank comments about medical students and medical administration helped to guide me on my home campus. I will be forever in his debt for that.

Randy Longenecker – Rural Guru. Randy mentors me to this day. I have consulted with him many, many times and he has always been very kind. I look forward to our continued work together.

Bob Daugherty – Dr. Daugherty grew up in a small town in SW Kansas. His father was a solo GP in that town in the 30s and 40s. Dr. Daugherty then went to medical school at KU. Following that he has had an illustrious career in academia and has served as Executive Dean. He also continues to serve as an excellent mentor.

Belinda Vail (Chair Family Medicine) and **Mark Meyer** (Senior Associate Dean for Student Affairs) are colleagues that were just 1-2 years ahead in medical training. I have known them for 30 years and they have served as teachers, advisors, mentors and supervisors. I wouldn't be where I am today without their guidance.

Cynda Johnson – Dr. Johnson started her career in Kansas. She then became chair of Family Medicine. Since then she has served as Executive Dean at two institutions. I have sought her advice in many things over the years. Her most recent endeavor was as founding dean of the Virginia Tech Carilion School of Medicine. Yet she always found time to talk to me.

There are many other RME friends that I consider advisors and there are too many to mention.

Michael Kennedy, M.D.

During your time as a rural medical educator, what is your most humorous memory?

There are so many humorous stories. One of the ones that stands out is the RME conclave in 2015 that we had in Salina. I remember that we hired my daughter and her husband to be photographers during the event. During the event Matt Hunsaker came up to me and said "Wow that photographer is beautiful. Do you have her name and contact information?" I lead him on for a while and wouldn't really give him the information. Then finally revealed to him that this was my daughter and that she was married with children. He was horrified and apologized profusely. We still laugh about it.

Maybe not so humorous, but memorable, was the RME Conclave in February 2013. We went to Rockford, IL for the meeting. It was Wednesday, Thursday, and Friday. I decided to drive since it is only about 7 hours from KC. Well...we were at the dinner event on Thursday and we were due to leave the next day at noon. I was watching the weather since I chose to drive and they were predicting a blizzard overnight.

I knew that if I stayed and left Friday that I would be stuck. And what made it worse was that I was driving my brand new 2013 Chevy Volt. This car has an electric motor with gas backup and has a ground clearance of only about 4 inches. I would be driving a snow plow with no power. So I made the choice to leave right after the dinner about 8:00 PM.

I was going to drive through the night and get home about 4:00 AM. Everyone was questioning my sanity. I was questioning my sanity! But, I drove through the night and pulled into my driveway at 4:00 AM and the first flakes started to fall! I went to bed and woke later that morning to 15 inches of snow in my driveway! It turned out to be the right choice. I still haven't lived down the sanity issue. Seriously, I really felt the concern from my colleagues and they expressed their genuine regard for me and my safety. They made me promise to call as soon as I got home safely. The RME group is a very close group. I think that is one of the main things that I have enjoyed the most about the RME.

During your career, how have you dealt with insufficient funding/resources?

Actually, I have been very fortunate. Since I began my career right about the time that KU decided to have renewed interest in making "rural" a main mission of the school; funding has not been a major issue for most things.

Thinking back on your career, what 3 organizations have had the most influence on your ability to succeed?

- KAFP, AAFP
- NRHA
- STFM

Michael Kennedy, M.D.

Imagine that you are gifted 50 million dollars for rural medical education. How would you spend this money to achieve the greatest impact on addressing rural medical workforce shortages?

I think there needs to be an early start program in rural areas that identifies students early in K-12. Although, there will always be late bloomers, targeting students early that show interest and academic promise is important.

A program that would supplement their education in math and science to give the skill set needed to be successful in healthcare careers is crucial. More than that it plants the seed that healthcare is a viable career in rural America.

Students need to know that they can do it. They need mentoring. High school educators and counselors need to be well versed in what it takes to be in medicine. Local rural physicians need to participate but they need a stipend to offset time from working.

We could establish a health academy that has several functions throughout the year. There should be a prominent area at local fairs and event to feature work that the students are doing. We have begun the conversation in Kansas about a program with FFA. Then we need to establish a Rural Center in Kansas for Healthcare and Workforce development. This would need to address public health issues and rural health equity issues.

The Center would function to generate rural health research, policy development, workforce analysis and healthcare education. Lastly, we need to find a way in our society to truly integrate learners in our healthcare delivery system. Currently, learners are tolerated and a side activity. Teachers are not directly rewarded or supported. Until we can integrate learning into the milieu of healthcare delivery then we will always struggle to find ways for learners to get the experiences they need.

What advice or recommendations for the RME group do you have for addressing physician shortages in rural America for the 21st century? I addressed this above. Other suggestions:

- Have an accurate assessment of supply, demand and attrition
- A data system like we have been trying to establish for years (the work of Kathleen Quinn)
- Appeal to those who want to live by "Rural by Choice"
- Personal involvement, which means mentor many students
- Have students "do" not "watch" (active learning)
- Start very early in the lives of rural children, K-12
- Frequent and varied programs to keep interest up



James Leeper, Ph.D. Alabama

Birthplace: Waterloo, IA Hometown: Waterloo, IA

High School: East High School,

Waterloo, IA

Undergraduate College/University:
University of Iowa, BS, Physics and
Astronomy

Graduate School: University of Iowa, PhD, Biostatistics

As of 2020, how long have you been in rural education?
43 years

Name and affiliation of key Rural Program(s) that you have developed or sustained:

- Rural Health Leaders Pipeline (Rural Health Scholars, Minority Rural Health Scholars, Rural Medical Scholars, Rural Community Health Scholars)
- Master's degree in Rural Community Health, Rural Medicine Clerkship all at the University of Alabama, College of Community Health Sciences (University of Alabama School of Medicine – Tuscaloosa Campus)

Favorite rural location that you have visited in the U.S., and why:

Leeper family farm and Leeper prairie preserve near Clarksville, IA (farmed by my great-grandparents, grandparents, and uncle)

[I've] always had the interests and needs of the students as my top priority.

Leeper 49

What is one of the most common myths or misconceptions about how to successfully recruit and retain doctors for rural medical practice?

Potential students who grew up in rural areas are not academically prepared to be successful in medical school.

When colleagues reminisce about your role and accomplishments in rural medical education, what do you think they will say? I always had the interests and needs of the students as my top priority.

What kind of values have you cultivated and lived by?

Work hard, be kind, and help others.

What do you think is one of the most significant events that impacted rural medical education during your career?

The growing network of rural medical educators to share ideas.

How have you dealt with unsupportive leadership in institutions that did not appear to make rural medical training a priority?

Persisted with agenda and spoke to power to convince leadership of the necessity of the programs and enlisted community partners (including legislators) to push the agenda.

Who were your mentors and how did they impacted your career?

When I came her 43 years ago to join a Department of Community Medicine, I knew very little about the discipline of rural medicine, but Bob Gloor and Doug Scutchfield got me out visiting medical students and rural preceptors during their rural rotation. Bob always told me, "You are here for the medical students." When I recruited John Wheat to the faculty, the development of rural medicine went to a whole new level.

During your time as a rural medical educator, what is your most humorous memory?

When a medical student showed a video from his rural rotation when he was checking on a cow's pregnancy.



During your career, how have you dealt with insufficient funding/resources?

We have been fortunate to be pretty well funded, although there is not enough staffing at times. Those who are left doubled up on what they do.

Imagine that you are gifted 50 million dollars for rural medical education. How would you spend this money to achieve the greatest impact on addressing rural medical workforce shortages?

Hire a recruiter, provide scholarships for our Master's degree year and pay rural preceptors a stipend for training our students.

Thinking back on your career, what 3 organizations have had the most influence on your ability to succeed?

National Rural Health Association, American Public Health Association, Society of Teachers of Family Medicine

What advice or recommendations for the RME group do you have for addressing physician shortages in rural America for the 21st century?

Press for national and state funding for RME and rural hospitals.

Leeper 50



Randall Longenecker, M.D. Ohio

Birthplace: Bainbridge, GA Hometown: Colquitt, GA

High School: Middletown, PA

Undergraduate College/University:
Eastern Mennonite College,
Harrisonburg, VA; BS in Biology, 1975
Graduate School: University of
Pennsylvania School of Medicine,
Philadelphia, PA; MD, 1979
Residency: University of Wisconsin
St. Mary's Hospital Family Medicine
Residency, Madison, WI; 1979-1982

As of 2020, how long have you been in rural education?

34 years

I consider myself a
"reflective practitioner,"
always looking to do
things better, but...I am
not a perfectionist –
many times, good enough
is better than the best.

Name & affiliation of key Rural Program(s) that you have developed or sustained?

- The Ohio State University Rural Program, an integrated rural training track (RTT) – Designed, implemented and sustained until closure in 2012.
- The Rural Medical Educators After foundational work by Bob Bowman 2000-2003, I designed and, together with Byron Crouse, implemented the infrastructure in 2004 that has continued to the present
- The Ohio Rural Health Scholars Program, for students from all of Ohio's medical schools -Designed, implemented and sustained to the present as its director, anticipating our 19th annual retreat in October 2020
- The RTT Technical Assistance program –
 Designed and directed this HRSA
 grant-funded cooperative agreement
 2010-2013; became senior advisor 2013-2016
 to avoid a COI with The RTT Collaborative
- NIPDD Rural Fellows scholarship program –
 2011 to the present
- The RTT Collaborative Designed, established as a nationwide Board-directed 501c3 non-profit cooperative of rural programs in medical school and residency in November 2012, and continue to serve as executive director, 2012 to present
- Rural and Urban Scholars Pathways program, Ohio University Heritage College of Osteopathic Medicine - Designed and implemented in 2013, as Assistant Dean for Rural and Underserved Programs, I continue to provide oversight to a Director of the program

7

Key Rural Programs (continued):

- Office of Rural and Underserved Programs,
 Ohio University Heritage College of
 Osteopathic Medicine Established in 2013,
 and continue to serve as Assistant Dean
- Rural "Mini-LIC" A longitudinal integrated clerkship overlaid on a traditional clinical curriculum based on monthly rotations, 2016 to present, now an approved elective "Continuity in Primary Care," in both rural and underserved urban communities
- Rural PREP Associate project director, HRSA grant-funded cooperative agreement, 2016 to present; led the design of Rural PREP Grand Rounds, the Microresearch program, and Rural Health Professions Research Design & Dissemination Studios
- Rural Residency Consultation Learning Community – Leading the design this year, beginning February 2020, and anticipating implementation this summer and fall.

Favorite rural location that you have visited in the U.S., and why:

Wherever I am right now, because home is where my heart is! However, I have visited many rural locations around the world and haven't found one yet that I didn't like. I love the people I've met in rural places and greatly appreciate and enjoy the natural environment. I am a photographer and enjoy capturing the rural context. I also love solitude, just not all the time!

What is one of the most common myths or misconceptions about how to successfully recruit and retain doctors for rural medical practice?

That only individuals born or raised in rural places will go there to practice; in fact, the majority of rural medical educators and rural physicians grew up in an urban place and fell in love with the rural life and rural practice. We cannot simply select our way to success through the admissions office; we need to inspire and persuade others to join our cause.



When colleagues reminisce about your role and accomplishments in rural medical education, what do you think they will say?

I think I'm known for my "eyes-wide-open optimism," for my persistence and creativity, and am respected for my ability to get things done. I've been told I have a way with words and have been praised for my ability to facilitate groups. If Bob Maudlin is known as the father of "1-2" RTTs, then I'm the inventor and father of the integrated RTT.

But some might say I have a dark side as well. I'm known for both self-deprecation as well as arrogance; I can be blunt (brutally honest). I am known for my critical thinking, which some experience as harsh criticism. I prefer to think of criticality as a good thing. Although I aspire to excellence, I am not a frustrated perfectionist. I do not live with regrets or self-doubts. I make mistakes all the time and am happy to admit and learn from them!

What kind of values have you cultivated and lived by?

From both grandparents, and my parents, I learned the importance of integrity, love, hard work, and humility (not as self-deprecation, but rather honestly acknowledging what I do not know).

I consider myself a "reflective practitioner," always looking to do things better, but as stated above I am not a perfectionist – many times, good enough is better than the best.

I embrace the virtues as well as the principles of medical and professional ethics, embracing the domains of competence for rural practice that I was blessed to be able to publish.



What do you think is one of the most significant events that impacted rural medical education during your career?

The concept of Rural Training Tracks in both medical school and residency – a counter to centralized and urban-based medical training that arose in the days of Flexner. However, I believe COVID-19 has more potential to disrupt the rural health and rural medical education landscape than anything else in my lifetime.

How have you dealt with unsupportive leadership in institutions that did not appear to make rural medical training a priority?

Neither of the two academic institutions with whom I've been associated to date has made rural medical training a top priority. Both institutions have had their strengths and weaknesses. In both cases, I accept that rural medical education and training is almost certainly not what is most important to many large organizations and academic medical centers. In the first institution, individuals admitted and owned this; in the latter, rural is professed as a priority, but it clearly is not. In some ways I prefer the former setting, because I was able to have a robust and honest conversation and take honest feedback about my work in order to make my programs better. In the latter setting, it's been more difficult, in a sense, because they are much less open to feedback themselves and it doesn't feel like an honest relationship. In the latter case and on the positive side, I've been able to operate with some autonomy – it's a looser ship and there's a lot of tolerance, if not full-throated support. In both cases, I've been the outsider – in the first case, rural in an urban tertiary care focused institution; in the latter an allopathic physician in an osteopathic rural-based institution with urban campuses and larger urban partners like the Cleveland Clinic. I continue to have a faculty title in each and continue to espouse rural medical education and training.

Who were your mentors and how did they impact your career?

There have been many heroes, and peers, although I would have difficulty naming a particular mentor:

- Daniel Suter College professor who chose teaching and leading a pre-medical program at a small faith-based liberal arts college over research in neurobiology at an academic institution
- **Gail Stephens** the intellectual basis of family medicine and generalism
- lan McWhinney the personal physician
- Peter Sterling a rogue anatomy professor who, believe it or not, introduced me to systems theory and the importance of context
- Maria Delivoria-Papadopoulis a neonatologist and medical school mentor who as a young physician in Canada "invented" the neonatal ICU
- Salvador Minuchin a family therapist who furthered my understanding of complex systems in families
- Harry Graber a rural GP and later cardiologist who with colleagues at OSU and Harvard discovered the first genetically encoded cardiomyopathy; he like to say that "just because your rural or small doesn't mean you can't aspire to and achieve excellence and scholarly work
- Donald Schon The Reflective Practitioner
- Stan Kozakowski fellow NIPDD participant,
 PD, and peer support
- Bob Maudlin the father of RTTs
- David Loxterkamp written stories of rural practice
- Jim Damos fellow RTT PD
- So many of the Rural Medical Educators
 (Crouse, Boulger, Wheat, Florence, ...) –
 who I first met in 2000 and, in the words of
 David Loxterkamp, immediately adopted as
 "my tribe"

During your time as a rural medical educator, what is your most humorous memory?

Christmas party, 1998, when our first two RTT residents dressed up as Santa's elves and roasted our office staff, roundly embarrassing one of our nurses and bringing levity to a practice that took its work and fledgling residency very seriously!

During your career, how have you dealt with insufficient funding/resources?

I am a big advocate of bricolage – making do with what you have. Even now, The RTT Collaborative sets its budget for the following year based upon what we have in reserves, so that even if we had no income, we could survive a year or two.

Randall Longenecker, M.D.

Imagine that you are gifted 50 million dollars for rural medical education. How would you spend this money to achieve the greatest impact on addressing rural medical workforce shortages? I'd put a lot of it into an endowment and run the office of rural and underserved programs at our school and fund the administration of The RTT Collaborative in perpetuity! But I'd also invest 10 or 20 million into a fund for micro-grants to rural programs for rural scholarship and innovation.

Thinking back on your career, what 3 organizations have had the most influence on your ability to succeed?

- Society of Teachers of Family Medicine, the organization I consider my academic home
- The Rural Medical Educators, who I consider my tribe
- The RTT Collaborative, the organization whose people and participating programs make me hopeful for the future

What advice or recommendations for the RME group do you have for addressing physician shortages in rural America for the 21st century?

- Remember and revisit your roots in rural communities the beginning and end and the why of all that we do
- Grow your own your own rural workforce, your own leaders, your own peer community – but do it together
- It will never be enough there will always be inequities and injustice so make the most of what you have.

Any additional comments:

In the spirit of *A Fortunate Man*, I have been incredibly fortunate to have been born and raised in a family and faith community steeped in service, mutual aid and counsel, and concern for the welfare of others and for our earth, to have lived and served in an appreciative rural community, to have had a wonderfully loving and supportive spouse and gifted children, to have had wonderful and inspiring peers, and to have had a deeply meaningful career that just keeps getting better!



Kathleen Quinn, Ph.D. Missouri

Birthplace: Kansas City, Missouri Hometown: Columbia, Missouri High School: David H. Hickman H.S. Home of the Kewpie Dolls

Undergraduate College/University: University of Missouri – Columbia; Bachelor's degree in Educational Studies

Graduate School:

University of Missouri – Columbia: Master's degree in Counseling Psychology; PhD in Educational Leadership and Policy Analysis

Name and affiliation of key Rural Program(s) that you have developed or sustained:

- Rural Scholars Program
- Rural Track Pipeline Program

Favorite rural location that you have visited in the U.S., and why:

ETSU in Johnson City, Tennessee and surrounding rural areas. It was beautiful, I learned a lot about the rural clinical care in the mountains, and it was not cold!

As of 2020, how long have you been in rural education?



6 I invest in others and myself. The number one reason I pursued my doctorate was to have a voice in an academic medical school. I have encouraged others to advance their education as it adds credibility to our work.

55 Quinn

What is one of the most common myths or misconceptions about how to successfully recruit and retain doctors for rural medical practice?

Myth: Recruiting and accepting rural background students into medical school is enough to address rural workforce shortages.

Students from rural areas are the most likely to return to rural areas but they need to be educated and prepared for rural practice so they return and stay. Same for urban background students. Students need to be exposed to rural practice multiple times experiencing rural medicine with many preceptors to understand and be prepared. If this happens, these physicians will help address shortages when they decide to go rural! During interviews, we assess students' rurality by asking questions such as:

- Why is it critical to increase the number of rural physicians?
- Why is there a shortage of rural physicians in the U.S.?
- How would you solve the rural physician shortage?
- Why do you want to practice rural medicine? What do you think it will be like?
- Would you want to raise your children in a rural area?
- What are the barriers to practicing in a rural area and how would you overcome?

It is not enough to be from a rural community. Students must have an understanding and intrinsic desire to address the need. In addition, we provide rural clinical experiences three times during medical school. We have found the more times students are exposed the more likely they are to return to a rural area and practice primary care. Good mentors are also extremely important!

When colleagues reminisce about your role and accomplishments in rural medical education, what do you think they will say?

I hope they say I built a program and made it great through constant evaluation, emulating others' good work (Improved our pre-admissions program by working with William Coleman, Implemented a Community Integration Program by attending WONCA early on, Emulated Mark Deutchman's Rural Immersion Program), Collaborating with RME, and taking corrective action when necessary. I also built a broad based coalition to implement a Missouri.



Health Care Workforce web application after seeing a presentation on the Cecil G. Sheps Center presentation at NRHA by Erin Fraher. It has taken 10 years and getting a law passed but we now have an application intended to support policymakers and planners in understanding the status and future trends of the healthcare workforce at the state, regional, and local levels.

What kind of values have you cultivated and lived by?

- 1. I invest in others and myself. The number one reason I pursued my doctorate was to have a voice in an academic medical school. I have encouraged others to advance their education as it adds credibility to our work. On the personal side, I do my best to balance my personal and professional lives and support others doing the same.
- 2. I take time to establish relationships. I believe the relationships I have with community partners, sponsors, students, legislators and stakeholders, in addition to hard work, is the key to the program's success. There is a lot to be said for mutually beneficial, trusting relationships to stay funded and supported.
- 3. I treat others with respect and help them develop their strengths, especially the ones I do not have. I am good at many things, but budgets and data analysis (among other things) are not on the list. I hire, support, and promote those with the skills I do not possess to ensure a diverse, multi-talented, and strong team of professionals.
- 4. Finally, I incorporate humor into my day (even if I only crack myself up) and make sure people know making mistakes is an extremely effective way to learn.

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significant events that impacted rural medical education during your career? I am hoping it is COVID-19! The coronavirus highlights the problems of rural and underserved disparities. The virus exponentially and negatively affects rural areas due to workforce shortages, hospital closures, and lack of access to care. My hope is AAMC will start collecting data from the Rural Programs nationwide to determine what pieces of the pipeline are most effective; schools will prioritize admissions of rural background students and support primary care; sponsors will fund rural medical education at all levels; all states will expand Medicaid; legislation will increase reimbursements to rural hospitals, etc. We have been advocating for rural years but it always takes a disaster to make things more equitable. A close second for a positive impact for rural medical education is the increase in

What do you think is one of the most

How have you dealt with unsupportive leadership in institutions that did not appear to make rural medical training a priority?

world a better place.

women in medicine. Women make the (rural)

In 2004, at my first RME Conclave, John Wheat talked about being worried when the "old guys" retired, the rural programs would go away because leadership did not support them. I was so inspired by the Conclave's participants and what their programs had accomplished, I made it a priority to do well and self-promote the accomplishments of the program. How can leadership be unsupportive when you are funding 28 people in 10 departments and graduates are practicing in rural Missouri addressing access issues? Take that!

Who were your mentors and how did they impact your career?

I have had many mentors through RME – Matthew Hunsaker, Joe Florence, John Wheat, Jim Boulger, Jay Erikson, Lisa Dodson, Michael Kennedy, Jim Leeper, Davis Patterson, Mark Deutchman, Randy Longenecker, Mary Barinaga, and Dave Schmitz to name a few! These mentors taught me the importance of scholarship, comradery, and working together for the greater rural good. My most influential mentor was my boss from 2004-2014, Weldon Webb. He was not a physician and he did not have a terminal degree. He had to earn respect.

He taught me to do the same. He told me to self-promote the programs through success stories; to hire people smarter than myself; to never surprise my boss or superiors; and that it did not matter if I got recognition for my work as long as my goals for the program were met and I was making a contribution to rural health.

During your time as a rural medical educator, what is your most humorous memory? My answer has to do with Matthew Hunsaker and Michael Kennedy. Enough said! I'm sure people are laughing!

During your career, how have you dealt with insufficient funding/resources?

When I started in 2000, the rural programs were 100% grant funded. I was always worried the programs may not be sustainable. We worked very hard to establish a quality program, published, supported students and training sites, and eventually institutionalized the program by proving outcomes and securing school of medicine funds. Grant funding is still a larger part of the budget as compared to institutional dollars, but we are secure in that we provide physicians for rural Missourians and the benefits are undeniable.

Imagine that you are gifted 50 million dollars for rural medical education. How would you spend this money to achieve the greatest impact on addressing rural medical workforce shortages?

Preceptor development and training, expanding training sites, engaging communities on a much larger scale, improving interprofessional experiences, establishing rural residency programs, funding rural hospitals, and working on multi-institutional publications.

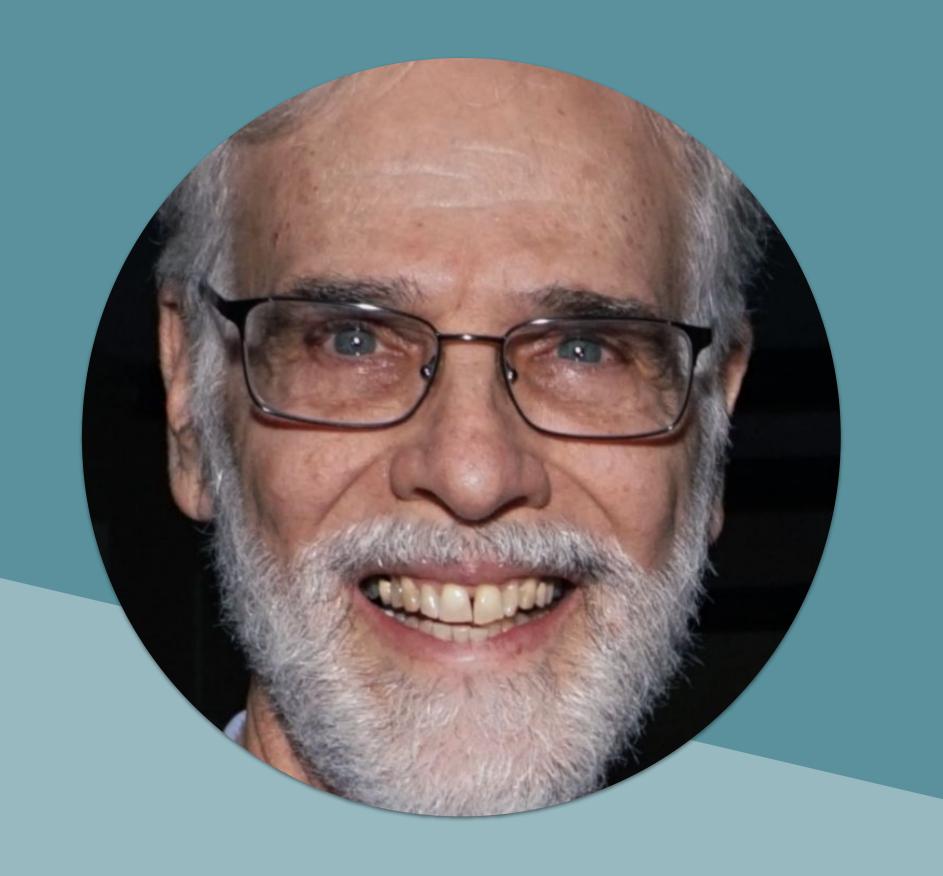
Thinking back on your career, what 3 organizations have had the most influence on your ability to succeed?

NRHA especially Rural Medical Educators
HRSA
DHSS

What advice or recommendations for the RME group do you have for addressing physician shortages in rural America for the 21st century?

Never give up, diversify funding, continue to share best practices, engage our graduates, and advocate for everything rural.

Quinn 57



Howard Rabinowitz, M.D. Pennsylvania

Birthplace: Pittsburgh, PA Hometown: Pittsburgh, PA

High School: Taylor Allderdice HS

Undergraduate College/University:
Rutgers University, Psychology,
no degree (left after 3 years to go to
medical school)

Graduate School:

University of Pittsburgh School of Medicine, MD

As of 2020, how long have you been in rural education?

My first rural experience was after my first year of residency, when I volunteered for 2 years in the US Public Service at the Pima Indian Hospital in Sacaton, Arizona. This was primarily a service experience, though we did have medical students working with us. Then after taking my first post-residency position in 1976 on faculty at Jefferson Medical College (now Sidney Kimmel Medical College of Thomas Jefferson University), I was asked to serve as director of our recently initiated rural program (PSAP), which I did for 43 years.

Name and affiliation of key Rural Program(s) that you have developed or sustained:

Jefferson Medical College's rural Physician Shortage Area Program (PSAP). The PSAP was started in 1974, and I was the first PSAP Director starting in 1976, remaining in that role until I retired in 2019 (now Emeritus Director).

Favorite rural location that you have visited in the U.S., and why:

The Pennsylvania small towns where our PSAP graduates are now in practice. I visited a number of them in 2002-03, when writing the book about our rural PSAP, 'Caring for the Country'.

I hope they will say that I worked hard to increase the supply of rural physicians, was passionate in mentoring and supporting our rural students, and that I played an important role in advancing the rural medical education outcomes literature base.

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What is one of the most common myths or misconceptions about how to successfully recruit and retain doctors for rural medical practice?

I believe there are many. First, that no one actually practices rural anymore, and that for everyone the life of a rural doctor is less attractive and rewarding than an urban or suburban doctor. That may be true for some, but not for all. Second, is that most doctors who practice rural do so because of a strong commitment to 'serve the underserved'; rather, our experience is that wanting to live in a rural environment is the most critical factor. And, third, because of this, recruitment of future rural physicians is fundamentally different than for urban underserved physicians, who can live in affluent suburban areas and commute to their work in inner cities.

When colleagues reminisce about your role and accomplishments in rural medical education, what do you think they will say?

I hope they will say that I worked hard to increase the supply of rural physicians, was passionate in mentoring and supporting our rural students, and that I played an important role in advancing the rural medical education outcomes literature base.

What kind of values have you cultivated and lived by?

Try to help others, and to work and focus on achieving long-term outcomes of whatever work I have undertaken.

What do you think is one of the most significant events that impacted rural medical education during your career?

Sharing the experiences among various medical schools in addressing this issue, and being able to learn from each other.

How have you dealt with unsupportive leadership in institutions that did not appear to make rural medical training a priority?

I was blessed in having a Chair, Dr. Paul Brucker, who then became President of Jefferson in the leadership role at Jefferson for the first 25 years of my career. Following that, our Department of Family Medicine chairs, along with the Deans of Admission, provided strong support for our program, even as the institutional leadership primarily focused their direction in other areas.



Who were your mentors and how did they impacted your career?

My primary mentor was **Dr. Paul Brucker**. He was an amazing person, physician, Chair, and University President – as well as mentor, colleague, and good friend. He passed away a few years ago, and I miss him dearly. He always focused on what was best for patients and the population, as well as the Department and University. He also started the PSAP! He was always able to listen and have a strong sense of what abilities I had (and those I did not), and match those with the existing needs.

My equally critical mentor, external to Jefferson, was **Dr. Jack Colwill**, former Chair of Family Medicine and Acting Dean at the University of Missouri Columbia medical school. Jack has been a lifelong mentor, and has also become a good friend, and he has been enormously helpful in my career and life. Two other very important mentors (and wonderful people) were: Dr. Nick Pisacano, founding Chair of the American Board of Family Practice (Medicine); and retired US Senator John D. (Jay) Rockefeller IV (D, WVa), with whom I worked for a year in the US Senate during the US health care reform legislative effort in 1992-93 and who was passionately focused on improving the health of the US people, and who taught me about the policy and political process.

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Howard Rabinowitz, M.D.

During your career, how have you dealt with insufficient funding/resources?

Our PSAP program was established to be a low budget admissions, educational, and mentorship program that was built into our school's existing educational framework, and which thus almost never had external funding. It was thus easier to maintain the program as funding priorities and resources varied over time.

Imagine that you are gifted 50 million dollars for rural medical education. How would you spend this money to achieve the greatest impact on addressing rural medical workforce shortages?

Given that this is a relatively modest amount of money nationally, I would use the money to financially incentivize medical schools to each develop an admissions program to preferentially admit qualified applicants who grew up rural and were committed to practicing rural; to support faculty to mentor them; and to provide rural clinical experiences for them. If I had lots more money, I would also provide loan repayment to the students going rural, and improve rural reimbursement for physicians.

Thinking back on your career, what 3 organizations have had the most influence on your ability to succeed?

First, Jefferson's Department of Family and Community Medicine. Second, the Robert Wood Johnson Foundation. Third, STFM.

What advice or recommendations for the RME group do you have for addressing physician shortages in rural America for the 21st century?

I would advise to focus on the admissions process, recruiting rural raised applicants who are identified as highly likely to practice rural. Then mentor them, provide them with rural experiences, and a rural cohort. While this is not the only pool of physicians to go rural, it is the group with the highest likelihood... and is the least expensive and thus most sustainable policy to increase the pool of physicians most likely to practice rural. Should additional resources be available, then additional rural clinical experiences for all students should be added. Similarly, rural residency programs are critically important to support and train rural physicians, though unless there are enough physicians planning to practice rural, it may be difficult to expand the capacity of these programs. And, while scholarships, loan repayments, and increased rural reimbursements are critically important to address this problem, it is often difficult for RMEs to directly impact this area – though advocacy for these areas is extremely important.

Rabinowitz 60



David Schmitz, M.D. North Dakota

Birthplace: Wilson, NY Hometown: Pekin, NY

High School: Niagara Wheatfield HS

Undergraduate College/University:
Canisius College, BA Biology
Graduate School:
State University of New York at
Buffalo

As of 2020, how long have you been in rural education?

20 years

Name and affiliation of key Rural Program(s) that you have developed or sustained:

ROME (Rural Opportunities in Medical Education) at University of North Dakota, rural resident rotations in Idaho, and Rural Training Track (RTT) residency programs across several states.

As a past-president of the National Rural Health Association, I am fortunate to have worked with many of our rural program key partners in sustaining medical education and healthcare nationally and internationally (the latter with Rural WONCA).

Favorite rural location that you have visited in the U.S., and why:

St. Maries, Idaho (...my first rural practice as a newly graduated family physician, also my favorite rural rotation as a resident!)

Stick together and never give up.

Make your own path but listen
first. Do your research and then be
humble in the face of both rural
and healthcare – both are bigger
than ourselves.

Schmitz

What is one of the most common myths or misconceptions about how to successfully recruit and retain doctors for rural medical practice?

Physicians seeking a practice "job" seem to most often ask (and are told) the "what and where" of the job, but too often not in the context of the "why". ("What will I need to do?" What will I be paid?" Where will I live?" Where will we shop?" What is the weather like?")

After caring for our friends, neighbors and visitors as a member of a rural community for years, the "what" and the "where" are necessary but it's the "why" and the "who" questions that sustain us, provide for resiliency, and yield the professional satisfaction of a career in rural medical practice. ("Why am I providing this service to my community?" "Why am I finding the energy to continue to do more, even at the times when my patients and community have less?" "Who have I become in my journey as a physician, and as a member of my community, since arriving?")

When colleagues reminisce about your role and accomplishments in rural medical education, what do you think they will say?

I hope that they will say that they saw in me, and in my actions, a passion for rural health and an openness for listening, understanding, and for sharing. I have been very fortunate and one of my early patients was correct in saying, "it would be difficult for me to return to rural health as much as I have been given as a physician." I am still working toward that.

I recognize that people sometimes "go into rural health" for loan repayment - but later the loan to be repaid isn't all about money, as it becomes the other way around. What is given to us as rural physicians (and rural medical educators) is much more, and we need to pass that on, and back, to rural.

What kind of values have you cultivated and lived by?

I seek personal wisdom humbly, as guided by my faith in Christ and in the Bible. I work not to judge people, starting from "where we are together, here and now", and first and foremost always striving to be professional. This often means thinking of how I can meet people where they are in their journey, in their own circumstances, and serve them with respect. I recognize that I am only a part of the whole that brings healing and health to my patients and that has been a key for my growth and resilience as a physician.



What do you think is one of the most significant events that impacted rural medical education during your career?
I'll give you two: First, the internet. Second, COVID-19.

The internet has changed how communication and information was and is shared, both in medicine and in medical education. This has, in many cases, made rural medical education more accessible while in other cases due to technology resource gaps, caused some rural communities to seem even more remote or behind in the ability to use this technology.

Twenty-five years later, the COVID-19 epidemic in the United States in particular has transformed communications and use of technology, specifically telemedicine. The regulatory changes including payment will transform access to certain aspects of care and along with it, medical education. Neither has replaced the requirement for hands-on procedural medicine and the relationships between physicians and patients – each of which are very much pronounced, practiced and necessary in rural medicine.

Who were your mentors and how did they impacted your career?

Paul James, MD (medical school faculty – convinced me I could become a rural family doctor). My patients and practice partners in St. Maries, ID (taught me how to be a rural family doctor). Ted Epperly, MD (taught me about leading to serve). Randy Longenecker, MD (still teaching me about rural community). NRHA staff and Rural WONCA (taught me how big rural is, bigger than my own experience).

Schmitz 62



How have you dealt with unsupportive leadership in institutions that did not appear to make rural medical training a priority?

I have not had this experience.

During your time as a rural medical educator, what is your most humorous memory?

Dictation/transcription errors before "autocorrect". I might refer a patient to a urologist, but never to a "eulogist"...glad I was proofreading carefully that day!

During your career, how have you dealt with insufficient funding/resources?

Anticipate this will happened and start with what you have. Build partnerships to make "stone soup". Don't be afraid to ask but when you do, avoid self-interest and bring a plan, making your best case the first time.

Imagine that you are gifted 50 million dollars for rural medical education. How would you spend this money to achieve the greatest impact on addressing rural medical workforce shortages?

Find ways to support those willing to teach that are practicing in rural places, primarily with "just enough" dedicated time, effective communication and faculty development support. Build local and interconnected support networks in a community broader than "medical education". (i.e. the Who will do it) Promote the social contract associated with medical education and the responsibility we have for closing the rural medical workforce gaps. (i.e. the Why we will do it) Promote dissemination of research and best practices for rural medical education to encourage adaptation and adoption. (i.e. the How we will do it).

Thinking back on your career, what 3 organizations have had the most influence on your ability to succeed?

The National Rural Health Association, The Family Medicine Residency of Idaho, Inc. and The University of North Dakota School of Medicine and Health Sciences.

What advice or recommendations for the RME group do you have for addressing physician shortages in rural America for the 21st century?

Stick together and never give up. Make your own path but listen first. Do your research and then be humble in the face of both rural and healthcare – both are bigger than ourselves. Become a rural generalist and you will remain community-supported and patient-centered. Stay open to opportunity, reach out, and never underestimate the value of collaboration toward a good cause.

Schmitz 63



John Wheat, M.D. Alabama

Birthplace: Tuscaloosa, AL
Hometown: Autaugaville, AL

High School: Hicks Memorial High School

3CHOO

Undergraduate College/University:
University of Alabama, Chemistry,
BS

Graduate School:

- University of Alabama School of Medicine, MD
- University of North
 Carolina-Chapel Hill, MPH
- RWJ Clinical Scholar
- US Navy for internship and service (with 2 years in remote NW Australia)
- Mayo Clinic for Internal Medicine residency

As of 2020, how long have you been in rural education?

30 years as faculty member at the University of Alabama School of Medicine-Tuscaloosa Regional Campus.



Name and affiliation of key Rural Program(s) that you have developed or sustained:

- Founding director of the University of Alabama Rural Health Leaders Pipeline, including Rural Health Scholars Program (high school), Rural Minority Health Scholars program (post-high school), and Rural Medical Scholars Program (Masters plus MD)
- Founding director of the Alabama Agromedicine Program
- Co-founder (with Jim Leeper) of the Masters in Rural Community Health, Rural Community Health Scholars Program, and the Department of Community and Rural Medicine
- Creator of the Rural Track in the University of Alabama School of Medicine
- Co-founder of the Alabama Rural Health Association
- Initiator of the Rural Alabama Health Alliance.
- Planner of the Black Belt Health Professions Scholars Program

Favorite rural location that you have visited in the U.S., and why:

'Hainted Holler' at Windham Springs, Alabama in north Tuscaloosa County.

During hunting season, my old friend Jack liked to tell me what was going on - a different tone and cadence for when the rabbit had been there earlier, when it was there now but in hiding, when it was sneaking along, but nothing was sweeter than that continuous rolling bell, "oooh..... oooh..... oooh..... oooh..... oooh..... oooh..... oooh..... oooh..... be ready!"

As night would fall over Hainted Holler and the crickets and frogs went quiet, there was absolutely no sound better than that rolling bell leading the yammer, bawling, chops, and yodels of the younger dogs and bringing back a rabbit from out of the swamp and around the hill-- and made doubly sweet by the echo bouncing off the other side of the hollow. (I wish I were there right now.)

What is one of the most common myths or misconceptions about how to successfully recruit and retain doctors for rural medical practice?

"You can out-bid opportunities elsewhere for missionary-minded young doctors who will fall in love with your lovely community."

When colleagues reminisce about your role and accomplishments in rural medical education, what do you think they will say?

- 1. He ran a good meeting.
- 2. He brought and developed good ideas.
- 3. He stayed the course.

What kind of values have you cultivated and lived by?

Integrity, equality, diligence

What do you think is one of the most significant events that impacted rural medical education during your career?

The economic climate associated with the Balanced Budget Act of 1997 reduced rural infrastructure (physical and human) that was central to vibrant rural medical education.



How have you dealt with unsupportive leadership in institutions that did not appear to make rural medical training a priority?

I have tried, sometimes successfully, to make use of political climates in which administrators' positive attention to rural medical education would be rewarded.

Other times, I have appealed to their social conscience and intellect by presentation of facts about needs and successful interventions. At times this approach has been successful when delivered via day-long site visits into austere contexts of rural Alabama and local doctors' offices. Sometimes, bringing in visiting academicians who appreciate our work has helped administrators value it.

When faced with metrocentric administrations that are adverse to rural programs and/or my leadership (thinking the resources could be used better elsewhere), I have removed myself from center of attention and helped rural constituents understand the situation so that they could effectively address it. This requires alternate ways of expressing one's commitment to rural medical education - perhaps through policy or research efforts, so that those observing and carrying on the programs will see that I still consider the cause just, compelling, and worthy of my (and their) influence. (I'll have to let you know how this plays out.)



Who were your mentors and how did they impacted your career?

During my formative years in graduate studies in rural health at UNC-CH, the following mentors took special interest in me and created in me the anticipation of a stellar system of healthcare for rural Alabama:

- Jacob Koomen MD, MPH, retired NC State
 Health Officer, was my master's program
 advisor who helped me visualize the
 influence that a committed public health
 official could play in the health of
 populations.
- Sagar Jain, PhD, chairman and instructor of Health Administration, coached me into understanding and using a systems approach to meeting population health objectives.
- Cecil Sheps, MD, a luminary in health services research and architect of UNC's Center for Rural Health Research, supervised my Master's research project and opened the door to relationships with other nationally known leaders in rural health at UNC.
- **Jim Bernstein, MS**, demonstrated state-of-the -art innovative Office of Rural Health administration.
- Eugene Mayer, MD, UNC AHEC Director, demonstrated the nation's bench mark AHEC and the power of federal-state relationships.
- Don Madison, MD, a medical school faculty member who taught rural medicine and had directed a RWJ Foundation program to create physician-administrator partnerships to develop rural clinics nationwide. He introduced me to the care needed to develop workable relationships between communities and medical schools in order to avoid loss of community resources to institutions.

- John Hatch, PhD, Professor of Health Education who had helped build the first rural community health center in the US (Mound Bayou, MS), acquainted me with the relationship between economics and health ("When crops fail, babies die"), racial disparities and related politics, and community development needed for rural health.
- Barbara Hulka, MD, Chair of Epidemiology and supervisor of my research to assess health promotion among rural cotton mill employees, taught me the rigors of the scientific process as applied to epidemiological studies in order to produce credible results.

During my formative faculty years at UT-Memphis and UASOM-Tuscaloosa:

- Reverend Herman Powell, Early Grove
 Baptist Church in the inner-city of Memphis,
 led me through the grinding socio-cultural
 aspects and politics of relationships
 between minority communities and
 majority institutions and the care needed
 to affect positive outcomes for the
 community.
- Reverend Vernon Swift, Elizabeth Baptist
 Church in West Tuscaloosa, and Cedric
 Head, my mentee assigned by Rev. Swift,
 reinforced lessons from Memphis and
 provided experiential learning concerning
 low income, single parent households,
 children with major socioeconomic
 disadvantages, and their responses to
 indigenous church-based initiatives.
- William Willard, MD, DrPH, Dean Emeritus of the UA College of Community Health Sciences (and past Dean at both University of Kentucky School of Medicine and SUNY Upstate Medical University at Syracuse), was a guiding light through his writings about community medicine for rural health and his personal admonition to expect stormy passage through the halls of academic medicine.
- William Winternitz, MD, Chairman of Medicine and a Willard protégé', who helped recruit me to Tuscaloosa and supported my ideas throughout the College of Community Health Sciences and UA.

Mentors (continued):

- James Pittman, MD, venerable Dean at UAB School of Medicine, recruited me during the late 1980s in a political climate favorable to rural medicine developments. He accepted my decision to establish an academic home at the regional campus in Tuscaloosa and promoted my ideas throughout the medical school and University of Alabama System.
- Jim Leeper, PhD, recruited me to the University of Alabama College of Community Health Sciences and Tuscaloosa regional campus of UASOM. He shepherded my growing expertise in community medicine in both the community and academia.
- Robert Garner, PhD, as UA Associate Dean of Arts and Sciences, guided me through the red tape of university bureaucracy to establish, secure resources, and stabilize the Rural Health Scholars Program, which launched the Rural Health Leaders Pipeline.
- Sam Wiggins, MS and Gwendolyn Johnson, MS, cooperative extension agents from Auburn and Tuskegee universities, respectively, fostered my involvement with farmers throughout Alabama.
- Remona Peterson, MD and Ainka Sanders
 Jackson, JD, who as students in the rural
 pipeline programs tutored me through
 concerns of cultural sensitivity and diversity
 relationships affecting rural minority
 students in majority academic
 environments.
- Terry Smith, Administrator at Bibb County Medical Center, endorsed and expanded my ideas and opened the doors to relationships with the Alabama Hospital Association and local county medical communities.
- **John Brandon, MD**, rural family physician, who exemplified the independent mindset and skill with handling uncertainty that is the sine qua non of a rural solo practitioner.
- **Jeff Dolbare,** Representative from Washington County, whose rural background and constituency led him to champion the cause of the pipeline for rural medical education and led me into relationships with effective voices in the legislature and government policy.



During your time as a rural medical educator, what is your most humorous memory?

I had missed the field trip, but passionately admonished the class about hazards on the farm of heights, ladders, and enclosed spaces when they presented a slide showing some of the class climbing up the side of a grain bin. Next slide... my partner leading a line of Rural Medical Scholars climbing to the top and peering in.

During your career, how have you dealt with insufficient funding/resources?

First of all, during the flush times, we placed in reserve enough funding to carry us an additional year in case funding were cut. Second, we developed strong relationships with agencies (e.g., rural schools, farmer groups, public health, rural physicians and hospitals) that considered our programs part of their plans for success. When the cuts came, we operated on reserves and rallied partners' support for state funding in the next year, successfully. We also wrote for emergency grants from state agencies on a couple of occasions to cover shortfalls in budget. This worked well as long as the administration was supportive.

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Imagine that you are gifted 50 million dollars for rural medical education. How would you spend this money to achieve the greatest impact on addressing rural medical workforce shortages?

I would develop a demonstration project showing how to produce the workforce and system to deploy them that would provide culturally competent, high quality care for America's most persistently underserved rural populations:

- Target the 25% (17) of Alabama counties with most persistent rural health care shortages, health disparities, and homogenous socio-cultural characteristics related to poverty, isolation, and minority status (e.g. the Alabama Black Belt with dark, lime-based soil and heritage dominated by a past cotton culture).
- Engage these counties' civic, church, health, and educational leadership in endorsing and operationalizing the plan that will include paying for the students' education as long as they remain in the health professions track.
- Adapt the two pre-college Rural Health Leader Pipeline (RHLP) programs to: a) oversample students from these counties averaging 6 students per county per year for each program (102 in each program), and b) distribute the programs into local community colleges and/or regional educational institutions serving those counties, each institution serving at least 10 and no more than 20 students in each yearly program.
- Engage colleges/universities in or identifying with this regional population (e.g., AAMU, ASU, Judson, TU, and UWA) in a consortium to provide and monitor a curriculum with uniform pre-health science offerings required of these students, whose interests might diverge within or apart from the health professions. Distribute pipeline students evenly among these institutions (at least 12 to each institution), but maintain regular joint curricular and extra-curricular activities among them.
- Engage in a consortium one or two regional universities and several in-state health professions programs to design and conduct a two-year post-bac/Master's program that strengthens students' qualifications to enter any of several health professional schools. Candidates for this program are the pipeline students who a) maintain a commitment to the health professions, b) graduate college without having found acceptance to a health professional school, and c) are judged on college performance and non-cognitive characteristics to have strong potential. This two-year program will provide academic preparation to enter any of several health professional programs, based on student interest and performance, and a Masters in Rural Public or Community Health. Each participating professional program will sit on the admissions committee for this post-bac/Master's program, agreeing to matriculate any student who completes the program, meets their qualifications, and applies.
- Construct a professional preclinical sciences curriculum that is endorsed by or utilized by several health professional schools (e.g., medicine, physician assistant, dentistry, pharmacy, physical therapy). The endorsement will assure that any student completing that curriculum and meeting the requirements for advancement into the clinical training in one or more health professions program can either continue in the health profession they started or switch to another.

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- Expand the professional consortium to include local and regional health care institutions (e.g., hospitals, community health centers, rural health clinics, nursing homes, emergency transport services, pharmacies, public health departments, and individual practices), health care insurance programs, family medicine residencies, and community development services to plan regional and local service centers, perhaps hub and spoke, that accommodate both undergraduate and graduate professional education in disciplines and specialties critical to the primary care of the Black Belt region with professional and referral affiliations for care needed beyond the region. A consortium requirement will be to meet universal quality standards of structure, process, personnel and care outcomes as determined by participating professional disciplines. Within this consortium and affiliations, conduct the required clinical training (undergrad and post grad) of pipeline students, including a major component as an inter-professional curriculum designed for health care of this region.
- On completion of the program, require students to serve within the region as part of the consortium structure or in a satellite affiliated with the consortium for a specified number of years to match the years of financial support they received, since starting the post-bac/Master's curriculum. Service required of those who did not complete the pipeline will be determined on a case-by-case basis considering the student's final qualifications and consortium needs throughout the pipeline.

Thinking back on your career, what 3 organizations have had the most influence on your ability to succeed?

Outside of my alma maters:

- The Alabama Education Association
- The Alabama Farmers Federation
- The Rural Alabama Health Alliance These organizations appreciated the value of the plan to "grow our own physicians" and exerted what influence they had to support its development.

What advice or recommendations for the RME group do you have for addressing physician shortages in rural America for the 21st century?

Organize from the grassroots up and from the grasstops down to develop the expectation and demand for rural medical education that can be tailored to specific rural populations. This organization must be broad to influence the political and policy process that will make this proposition feasible.

Any additional comments:

It is a good thing that I am on sabbatical, otherwise, I would not have found time for this reflection.

Afterword

Looking more deeply at the question posed earlier in the Foreword, "How do we get docs to go rural?", one may ask if the very question itself is imbued with an urban bias. Subtly, it suggests that doctors must somehow be coerced, or at least convinced, to choose a career in a rural location. It suggests that a rural practice is a form of banishment, somewhere you must "go" because you certainly haven't come from there.

Unless you have lived or practiced medicine in a rural community, you are not likely to have a realistic picture of rural medical practice. The sentimental memory of the solo general practitioner arriving by horse and buggy late at night to tend to a sick child has faded. Now, for many, the ideal image of a physician is the sub-sub-specialist who practices in the gleaming modernity of the urban medical center. Nowadays, the rural physician is stereotyped as an overworked and outdated doctor left behind as the medical field advances.

In reality, rural practice is a career choice that offers a chance to return to a home community or to live a desired lifestyle. Rural doctors know that there are ample clinical challenges and vibrant opportunities for professional growth when practicing small town medicine. Many rural family physicians enjoy a broad scope of practice and care for patients of all ages. Rural doctors continue to introduce novel medical treatments and procedures to their patients. And rural physicians enjoy the genuine appreciation and gratitude of their home community, a very special kind of reward.

The medical educators featured in this publication know this reality. Many of them practice or have practiced medicine in rural places themselves. They understand that for the right physician, a life in rural practice is the ideal fit. The goal is to identify, recruit, and support the "right physicians" using the evidence-based practices established over the past fifty years by many of the educators celebrated in this publication.

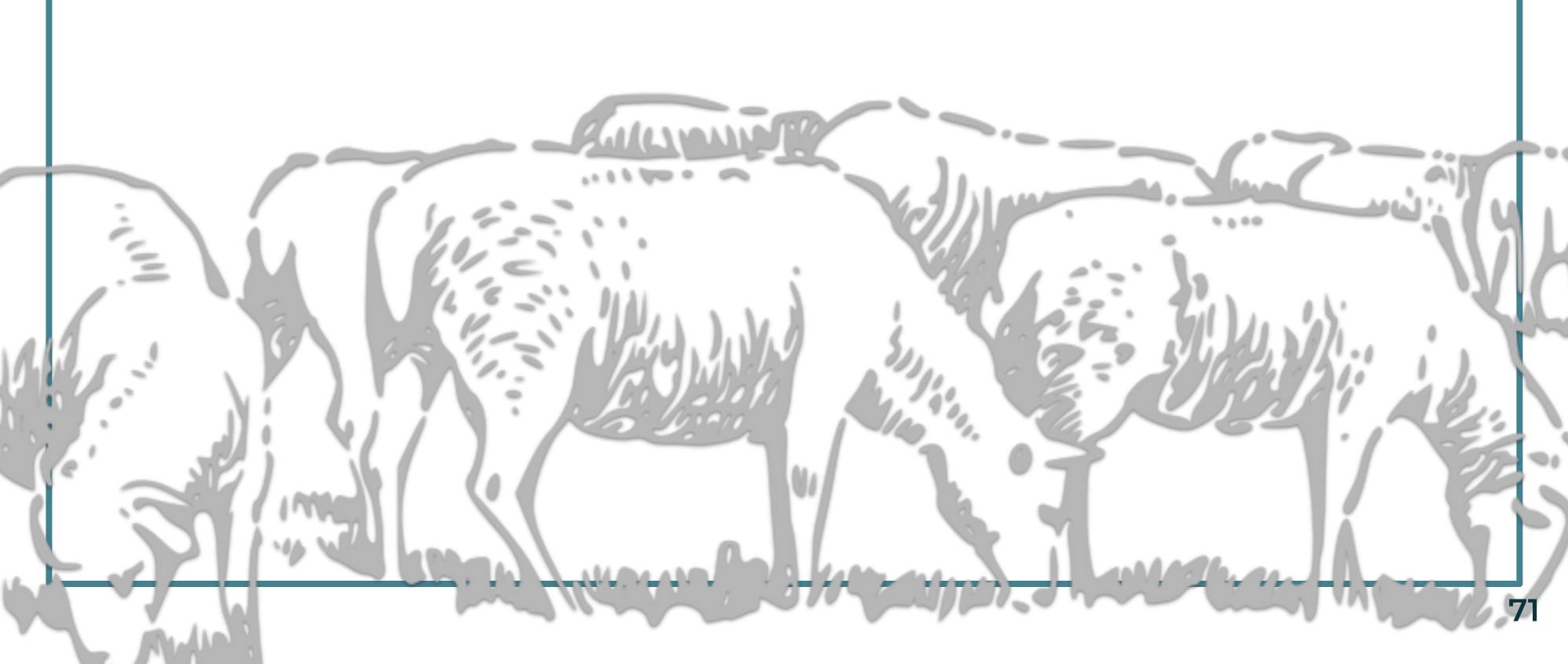
This publication could not include every leading rural medical educator working in the United States today. However, its purpose is to spotlight many of the thought leaders on the topic of rural physician shortages. By comparing the responses from these thought leaders to a common set of questions, it is hoped that the reader will gain a deeper understanding of the complexity and importance of training doctors for rural practice. The purpose of this publication is to capture the best practices in rural physician education at today's point in history.



But a point in history is just that. As the COVID-19 pandemic forces rapid change in rural healthcare delivery, there is an unanticipated realization that some of this upheaval may eventually benefit to rural citizens, such as improved access and payment for telehealth services. The pandemic-induced rapid changes offer a renewed look at some timeworn traditions, such as the house call. Perhaps in the near future, the cost and time burdens for patients to travel to doctor appointments may be partially lifted with new opportunities for telehealth virtual home visits. And the increased recognition of the critical role of county public health networks may prompt expanded investments in rural community health.

The landscape of rural healthcare delivery will continue to change. Methods to recruit and prepare physicians for rural practice will also continue to evolve. Readers of this publication may use it as a touchstone to understand where we are now, and to begin to move forward to reduce rural physician shortages and rural health disparities.

Emily Onello MD August 2020



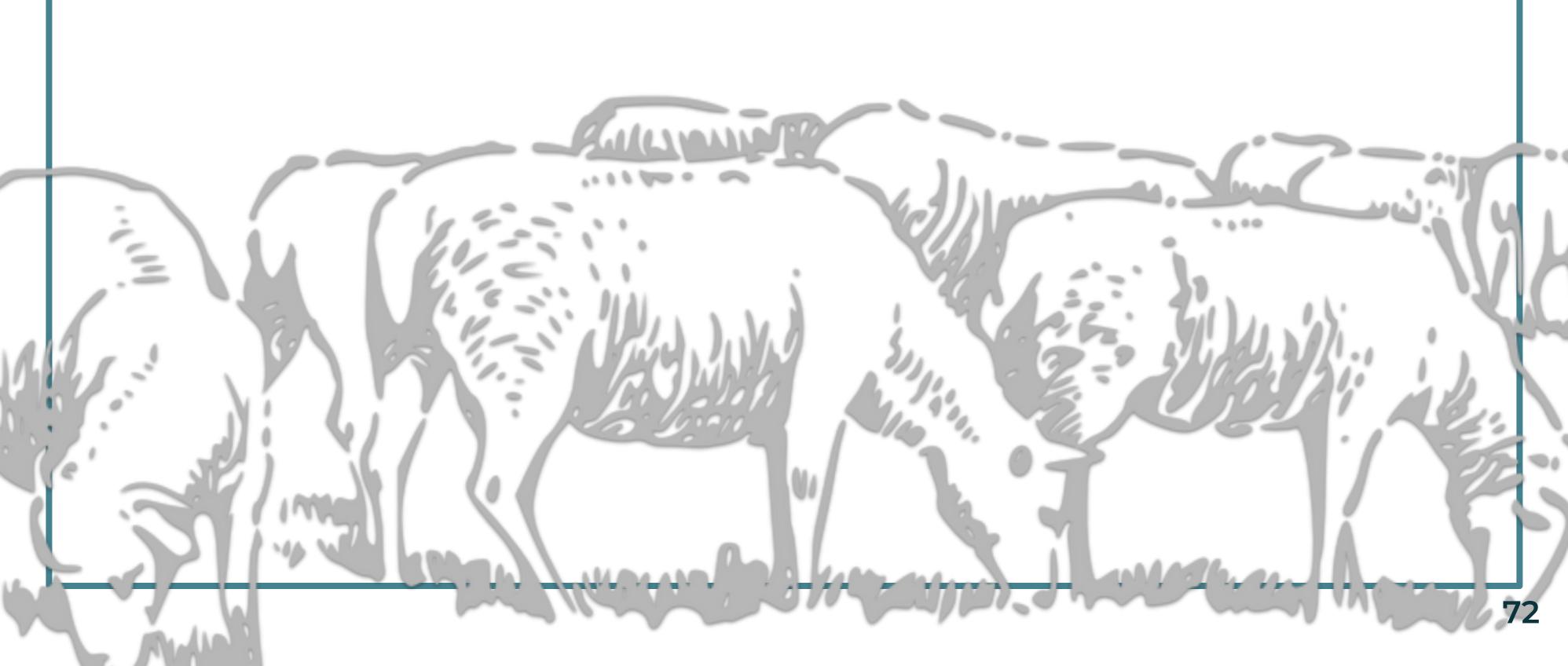
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Thanks also to Ms. Gabriela Boscan at the National Rural Health Association who was an early supporter of the project and who facilitated its dissemination on the NRHA website.

The creativity and talents of Mr. William Seay contributed greatly to the formatting and final appearance of this publication.

And lastly, a special word of gratitude to Jim Boulger PhD, whose vision, generosity and diligence inspired this publication. His short stature belies his towering height as a rural medical educator and a tireless advocate for rural family medicine.



Abbreviation Guide

AAFP American Academy of Family Physicians

AAMC Association of American Medical Colleges

AAMU Alabama A&M University

AHEC Area Health Education Center

AMA American Medical Association

ASU Alabama State University

ATSU A T Still University

C/section, C-section Cesarean section (surgical procedure)

CEO Chief Executive Officer

CHC Community Health Center

CHIP Children's Health Insurance Program

CLIC Consortium of Longitudinal Integrated Clerkships

COI Conflict of Interest

COPC Community Oriented Primary Care

COVID Coronavirus Disease (outbreak in 2019-20)

COVID19, COVID-19 Coronavirus Disease 2019

DHSS Department of Health and Senior Services (in Missouri)

DO Doctors of Osteopathic Medicine degree

DOC Doctors Ought to Care

DRG Diagnosis-related group

DrPH Doctor of Public Health degree
EMS Emergency Medical Services

ER Emergency Room

ETSU Eastern Tennessee State University

FM Family Medicine

FTE Full time equivalent

GME Graduate Medical Education

GP General Practitioner

Hazard-ARH Hazard Appalachian Regional Healthcare System (in Kentucky)

HITECH Health Information Technology for Economic and Clinical Health Act

HRSA Health Resources & Services Administration

HS High School

ICU Intensive Care Unit
IM Internal Medicine

IT Information Technology

Juris Doctor degree

Jichi Medical University, a medical school in Japan with rural training

focus

Judson College (Alabama)

KAFP Kansas Academy of Family Physicians
LIC Longitudinal Integrated Clerkship

MACRA Medicare Access and CHIP Reauthorization Act

MD Doctor of Medicine degree, from the Latin *Medicinae Doctor*

MPH Master of Public Health degree

NC State North Carolina State University

NHSC National Health Service Corps

Abbreviation Guide

NIPDD National Institute for Program Director Development (part of Association

of Family Medicine Residency Directors)

NP Nurse Practitioner

NRHA National Rural Health Association

OB Obstetrics

OB-Gyn, OBGYN Obstetrics & Gynecology

OPTIC Osteopathic Postgraduate Training Institute Consortium

OSU Ohio State University
PA Physician Assistant

PCMH Patient Centered Medical Home

PD Program Director (referring to physician residency programs)

Peds Pediatrics

PhD, Ph.D. Doctor of Philosophy degree

PSAP Physician Shortage Area Program

RHLP Rural Health Leader Pipeline (University of Alabama)
RHOP Rural Health Opportunities Program (part of UNMC)

RME Rural Medical Educators

RPAP Rural Physician Associate Program (University of Minnesota)

RTT Rural Training Track

RUOP Rural Underserved Opportunities Program

Rural PREP Rural Primary Care, Research, Education & Practice

RWJ Robert Wood Johnson

SERPA Southeast Rural Physician Alliance

SOMA School of Osteopathic Medicine Arizona, part of A T Still University

STFM Society of Teachers of Family Medicine

SUNY State University of New York

TRUST Targeted Rural Underserved Track (UWSOM program)

TU Tuskegee University (Alabama)

UA University of Alabama

UASOM

University of Alabama at Birmingham

University of Alabama School of Medicine

UK University of Kentucky

UMD University of Minnesota Duluth
UNC University of North Carolina

UNC-CH University of North Carolina at Chapel Hill
UNMC University of Nebraska Medical Center

US United States

UT-Memphis University of Tennessee Health Science Center in Memphis, TN

UW Med School University of Wisconsin Medical School

UWA University of West Alabama

UWSOM University of Washington School of Medicine

WONCA World Organization of Family Doctors

WRITE WWAMI Rural Integrated Training Experience (UWSOM program)

WWAMI Washington, Wyoming, Alaska, Montana, Idaho (states served by

UWSOM)

