



# NMSR Reports

The Newsletter of the  
New Mexicans for Science and Reason

NMSR Reports, David E. Thomas, Editor, 1201 Avenida de Chamiso Pl., Socorro, NM 87801 © 2020

**MAY MEETING:**  
NEW MEXICANS FOR SCIENCE  
AND REASON will hear

**Holly Olivarez**

on

**"The connection between Climate  
Change & COVID-19"**

**7:00 PM May 13<sup>th</sup>, 2020**

This will be a

**==>Virtual Meeting<==**

**=>Attend at your office or home!<=**

Research Fellow with a passion for learning how to effectively communicate climate change in ways that prompt scientists and non-scientists alike to find their unique way to contribute towards climate change solutions. As a scientist at CU Boulder, Holly studies the ocean and climate change; specifically, the absorption of carbon dioxide (CO<sub>2</sub>) by the ocean. To learn more about the speaker and this event, visit [ClimateChangeTalks.com](http://ClimateChangeTalks.com).

Because of the ongoing Corona virus crisis, this meeting will be held online, and members can attend from their homes or offices. It will be hosted on Zoom. A Zoom Link will be sent out to all members and potential attendees on the day of the meeting. To get added to the attendee list, simply email [nmsrdave@swcp.com](mailto:nmsrdave@swcp.com).

If all goes well, members will be able to interact, "raise their hands", ask questions, and so forth. And, if you missed the meeting, you'll still be able to watch the video later. Tune in at 7:00 PM May 13th, 2020, On Line!

**June or July 2020 NMSR Meeting: Keith Matzen of Sandia National Laboratories, on "High Energy Density Science with Pulsed Power -- From Fundamental Science to National Security Applications"**

Location and Date *TBD*

## MEETING LOCATION *VOTE!*

Please vote as to where meetings should be held. To vote online, visit [www.roundorflat.com/venue](http://www.roundorflat.com/venue), and let us know what you think. For snail mail, clip or copy this form, and send it to Dave Thomas, 1201 Avenida de Chamiso Pl., Socorro, NM 87801.

**When/Where should NMSR hold 2<sup>nd</sup> Wednesday meetings?**

- CNM 7 – 9 PM [ ]
- Copper Canyon 6:30-8:30 PM [ ]
- Other? \_\_\_\_\_ [ ]

## FUTURE MEETINGS ANNOUNCED

**May 13<sup>th</sup>, 2020 NMSR Meeting:**

**Holly Olivarez on "The connection between Climate Change & COVID-19"**

The coronavirus and climate change are connected in that both threaten the health and safety of our friends and family. This is a crucial time for us as communicators to find ways to talk with our family and friends about climate change. The speaker will share online resources and social media contacts you can follow to help you be more effective in your daily conversations.

Holly is a National Science Foundation Graduate



**New Mexicans for Science & Reason  
(NMSR)**

NMSR is a non-profit group with the goals of promoting science, the scientific method, rational thinking, and critical examination of dubious or extraordinary claims. NMSR meets at 7 PM on the second Wednesday of each month, in Albuquerque, New Mexico, at CNM's Student Resource Center, room 204 (@ Richard Barr Boardroom). NMSR Reports is its official newsletter.

**NMSR officers:**

**Dave Thomas, President**

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**John Covan, Vice-President**

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**Marilyn Savitt-Kring, Science Mom**

Membership: \$25/year (hardcopy newsletter), or \$15/year (downloadable PDF), make your check payable to NMSR, send to treasurer (Debbie Thomas).

**NMSR Advisors:**

- **Mark Boslough,**  
Physicist (Impacts, Climate Change, Global Warming). Sandia National Labs.
- **Kendrick Frazier**  
Editor, Skeptical Inquirer
- **John Geissman**  
Professor of Paleomagnetism
- **Alan Hale**  
Southwest Institute for Space Research
- **Randy Thornhill**  
Professor of Biology, UNM

Cyber-Cypher Clue: U = B, Y = W.

Bonus Puzzle Clue: Keep the ambulance full both ways.

**WANTED: READER ARTICLES & COMMENTARY**

Got something to share with NMSR members? Send it in! ATTN: Dave Thomas, Editor, NMSR Reports.

**REMEMBER,** our next NMSR meeting is **ONLINE!**

Zoom Meeting info will be emailed out, ask [nmsrdave@swcp.com](mailto:nmsrdave@swcp.com) for a copy.

**PUZZLE TIME!**

[Please send solutions to Dave Thomas at: [nmsrdave@swcp.com](mailto:nmsrdave@swcp.com), or at 801 Fitch Ave., Socorro NM 87801.]

**Cyber-Cypher: MAY PUZZLE**

(Submitted by Dave Thomas)

The following letters are a simple substitution cypher. If R stands for L, R will stand for L everywhere. Your Cyber-Cypher Clue: Clue? Oh, well - if you must, see p. 2.

" R E I C O Z    P C B S Z    H E W S R    I N Q  
R C M W ,    C R    R N D J    N P    F C W S  
R E I C O Z                    E O                    C X K N O S  
P F E R K F C Z K J    M E O    Z C B S    I N Q    E  
R Q O U Q D O . "    -    J D S B S D    O N E K  
N P    J K S    V E C F I    R K N Y

**SUPER SECRET WORD!**

However you prefer to do the cypher itself (above or below), simply duplicate those actions on the alphabetized row of cypher letters below. You'll build an answer key, and you'll also reveal - the Super Secret Word!

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

**APRIL CYPHER SOLUTION**

"TODAY, THERE ARE NO PROVEN SAFE AND EFFECTIVE THERAPIES FOR THE CORONAVIRUS. THAT DOESN'T MEAN THAT WE'RE NOT GOING TO DO EVERYTHING WE CAN." - DR. ANTHONY FAUCI

Esteemed April Code Crackers: Mike Arms\*, Austin Moede\*, and Terry Lauritsen\*!

\*Secret Word: "HEAR GUTSY DOC"

**SOCORRO STUMPER**

**Need more Secret Word Cryptograms?**

New puzzles every week at [www.nmsr.org/SocorroStumper.htm](http://www.nmsr.org/SocorroStumper.htm)



## May Bonus: “Corona EMT Blues”

Submitted by Dave Thomas



An emergency medical technician has to transport three individuals from a public testing site to a waiting area at the hospital. One of the three, Steve, has never been exposed to the coronavirus Covid19, and is Susceptible to getting the disease. A second person, Cathy, is Contagious with Covid19. The third person, Rachel, has contracted and Recovered from Covid19, but may still be contagious.

The medic can only transport one patient at a time. They can't leave the susceptible person and the contagious person together in either location, because if the EMT isn't there to enforce social distancing, the susceptible person could become infected. Likewise, they can't leave the susceptible person and the recovered person together in either location, because the recovered patient *might* still be contagious.

**The May Bonus:** How can the medic safely transport the three patients to the waiting area of the hospital, while maintaining social distancing?

## April Bonus: “Train’s a-Comin’”

Suggested by Rocky Stone, from “The 125 Best Brain Teasers of All Time - by Marcel Danesi”



A train leaves New York for Washington every hour on the hour. Similarly, a train leaves Washington for New York every hour on the half-hour. The trip takes five hours each way.

**The April Bonus:** If you are on the train from New York bound for Washington, how many of the trains coming from Washington going toward New York would you pass?

**Answer:** Ten.

**Congrats:** Allen Robnett (NM), Paul Braterman (UK), Terry Lauritsen (NM).

## James Gover on “City Economic Growth: Implications for New Mexico”

At our April 8<sup>th</sup> meeting, NMSR heard Dr. James Gover, IEEE Life Fellow, and all-around technology and policy wonk, spoke on “City Economic Growth: implications for New Mexico.” Gover’s main recommendations regarding State Education Content are:



- NM needs a TWO DECADE strategic plan for economic development that is based on data and analysis and is accessible to the public. The goal should be development of a sector that can grow to 10% of state GDP in 10 years.

- NM needs a university strategic plan linked to NM’s strategic plan for economic development that in 10 years results in 1 university in the WSJ top 50, 3 in the top 100 and all universities in the top 400. All university programs, but particularly STEM-based programs and business, must achieve high ratings.

- NM should focus its investments in high-tech education, emphasizing artificial intelligence (AI), data analytics, cybersecurity, Internet of Things (IoT), augmented reality (AR), robotics and machine learning (ML).

- Embed these topics in multiple majors in New Mexico’s universities and community colleges and make these major research topics. UNM already offers on-line Masters study in IoT that could be expanded to include other high-tech topics.

- Also introduce these subjects in NM K-12 Schools. Naveen Rao, Intel Vice President says, “Beginning in the elementary grades, school systems must start thinking about their curricula with AI in mind, including development of whole new education tracks.”

Gover also had a lot to say about Entrepreneurship as well.

- Only 3% of US universities, ALMOST ENTIRELY PRIVATE UNIVERSITIES, graduate 90% of today’s “unicorn” founders. (A “unicorn” is a solo tech startup company that reaches a \$1 billion dollar market value.) No unicorns are traceable to NM universities or NM National Labs.

- The University of New Mexico, New Mexico State and the New Mexico Institute of Mining and Technology with assistance from NM's government labs and Intel, must join that elite group and embed entrepreneurship coursework throughout their curricula.
- NM congressional delegation and NM governor must pressure USAF, DOE, SNL and LANL to spin-out NM-based companies



with potential to grow into unicorns, e.g., turn R&D 100 Awards into NM companies.

- There must be a community wide effort including government, religious organizations, K-12 schools, colleges and universities and public service organizations in NM to build an entrepreneurial, innovative mind-set and culture.
- It is time for NM's community of innovators to provide leadership and expand their voice in NM policy development.

How to get started? Jim spoke to the following actions.

- Have the Governor chair and appoint an Economic Development Committee of Executives from DOE, New Mexico Universities, National Labs, AFRL, U. S. Army, Intel, Major Cities, Think Tanks, Native Community, Mega Church Leaders, Major Counties and Retired Intellectually Elite, to:
- Develop Two-Decade State Economic Vision and Strategy for Reaching that Vision that Includes Developing a Sector Capable of Growing to 10% of State GDP
- Develop Strategic Role for Universities in Implementing State Economic Vision
- Develop Strategic Plan for Getting More State Economic Bang from Federal R&D Dollars Spent in New Mexico
- Develop Plan for Utilizing Public and Private Institutions to Build an Entrepreneurial Culture throughout New Mexico

Gover talked about stagnation in Albuquerque's tech-sector growth, and why NM needs to develop a replacement for Oil and NG Revenue, this decade. He compared Utah to New Mexico: Utah's BYU has spun-out 5 Unicorns, and Milken ranks BYU #4 for Tech Transfer. 1/6 BYU Students Take Entrepreneurship Course. Milken Ranks University of Utah #1

for Technology Transfer.

- UNM ranks a very high #28 for technology transfer + SNL and LANL have major tech transfer programs and science parks, but none of their spin-offs have grown into unicorns.
- Utah's Poverty Rate in 2017 was 9.7 percent. That was sixth lowest nationally. The national poverty rate was 13.4 percent. NM's poverty rate is 19.7 percent.

NMSR thanks Jim Gover for a thought-provoking presentation. **Both his slides, and a video of the entire meeting and discussion, are available on the NMSR meetings page, <http://www.nmsr.org/meetings.htm>.**

### More Skeptiverse Haiku!

by Keith Thomas

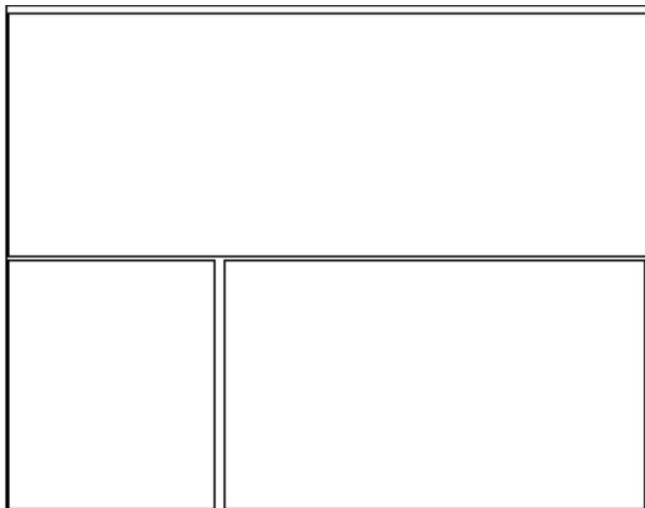
Toss aside science And reason!/Roswell's back for Another season.	Could we formulate A supplement to support Haiku awareness?
When the time arrives, Scientists use their hindsight To test their foresight	What might people call The mechanics who repair Quantum computers?
Crop circle stories – Some people can't seem to sift The wheat from the chaff!	Those with beards that shade Their blazers/Should still find use For Oakam's razor.

DUES check the date on your mailing label. If it's time for you to renew, or to make a contribution, please make your check payable to NMSR, and send it to Debbie Thomas, NMSR Treasurer, 3205 Alcazar NE, Albuquerque., NM 87110  
Name \_\_\_\_\_

Address \_\_\_\_\_  
Membership \$25 per annum (hard copy newsletter), or \$15 per annum (online newsletter).

**The NMSR e-mail list is fun! It's an e-mail list with news announcements of interest to NMSR members, discussions about news of the times, and more. To join, send a request to [nmsrdave@swcp.com](mailto:nmsrdave@swcp.com).**

Thanks to: John Covan, Eddy Jacobs, Debbie Thomas, Keith Thomas, and all our Puzzlers!



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**& COVID-19"**  
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**ONLINE**  
**on ZOOM**  
**7PM**