Abbreviated Resume: Dr. Ramon (Ray) Seidler, PhD.

Former Professor of Microbiology Oregon State University then later a Senior Research Scientist, U.S. Environmental Protection Agency, Office of Research and Development.

EDUCATION	
B.S.	California State University
	Northridge, California, 1964
	Major Biology, Chemistry
Ph.D.	University of California, Davis 1968
	Major – Microbiology & Biochemistry
	Postdoctoral Fellow University Texas, M.D. Anderson Hospital,
	Houston, TX. studied molecular biology 1968-1970

Professor, Department of Microbiology Oregon State University, Corvallis, Oregon 1970-1986

Senior Research Scientist and GMO Biosafety Team Leader, Terrestrial Plant Ecology Research Branch, U.S. Environmental Protection Agency, Corvallis, OR. 97333 1984-2001

During his career Dr. Seidler studied:

(at OSU) the origins, and health significances of pathogens in surface and drinking water, industrial and agricultural/forestry environments;

(at U.S.EPA) the development of methods to evaluate/predict the survival, multiplication, gene exchange, effects, and dispersal of recombinant organisms (GMOs or GE); Team leader/scientist, technical advisor to the research team.

Elected as Fellow American Academy for Microbiology, listed in the International Biographical Centre of Cambridge England list of the 2,000 Outstanding World Scientists of the 20th Century; Elected to Phi Kappa Phi honorary, Listed in Who's Who in Science and Engineering, Who's Who in the World and Twice received U.S. EPA Bronze Medals for research service to the agency. One of 3 founding editors of Molecular Ecology, a science journal dedicated to cutting edge research in this field. Dr. Seidler has authored/co-authored over 155 scientific peer reviewed publications, co-authored 2 books. He wrote the first Biosafety research plan for the U.S. EPA which described the research needed for the risk assessment evaluation of genetically engineered microbes and crop plants.

During his career he gave some 100 talks on GMO biosafety issues throughout the world. He has participated in over 50 regional, national, and international technical conferences and was the chief scientist in arranging several symposia/conferences during this period. During the 1980s he was the Chief EPA scientist involved in monitoring the first ever genetically engineered microorganism releases into the open environment.

Since retirement, Dr. Seidler has presented numerous talks on the health and environmental risk assessment issues pertaining to GE crops, impacts of pesticides and endocrine disruptors on beneficial life forms and the multitude of benefits associated with regenerative agricultural practices and the nexus with climate change. During retirement, presentations were made throughout the Western U.S. and in Central America. He has also testified many times before the Oregon legislature on pending bills impacting these topics and has been available to the press, as well as t.v. and radio audiences to discuss these issues .He was recognized in 2017 as the Oregon Organic Coalition Scientist of the Year. His Facebook page is entitled: "scientist says no to gmos". In 2020 Dr.Seidler was recognized on the roster of Albert Nelson Marguis

Lifetime Achievement inductees. He currently advises several regional nonprofits on these topics.

Activities since retirement: Three scientific publications.

Porteous, L. A., Widmer, F., and R. J. Seidler 2002. Multiple enzyme restriction fragment length polymorphism analysis for high resolution distinction of <u>Pseudomonas</u> (*sensu stricto*) 16S rRNA genes. J. Microbiological Methods. 51:337-348.

Sayre, P., and R. J. Seidler. 2005. Application of GMOs in the U. S.:EPA research and regulatory considerations related to soil systems. Plant and Soil 275:77-91.

Pesticide use on genetically engineered crops. R. J Seidler. 2014. Ag. Mag. Environmental Working Group (EWG). <u>http://static.ewg.org/agmag/pdfs/</u> <u>pesticide_use_on_genetically_engineered_crops.pdf?</u> <u>ga=1.123292994.836865422.1407774273</u>

My research interests on GE crops and my article on pesticide use mentioned here in this article by Mary Ellen Kustin. <u>http://www.ewg.org/agmag/2014/09/</u> agrichemical-industry-s-broken-promise

2014. http://mailtribune.com/opinion/scientists-find-multipleproblems-with-gmos "Scientists find multiple problems with GMOs" BY RAMON J. SEIDLER

Other activities:

2012. Guest lecturer University Honduras National University, Tegucigalpa, Honduras; topics included GMO biosafety and pathogens in the environment.

Organized, presented, and led a Climate Change Conference for the public in 2012 on the Southern Oregon University Campus, Ashland, Oregon.

Gave approximately 3 dozen public presentations, fund raiser appearances, and press interviews during the Jackson and Josephine Counties, Oregon GMO Biosafety and local ballot initiatives (2013-2014). Jackson County Oregon is the 5th U.S. county (of 7) to prohibit the growth of any GE crops and trees.

Invited speaker at the National Public Interest Environmental Law Conference, University of Oregon, Eugene, February, 2014

Invited scientific expert at the Oregon State Legislature on behalf of HB4100, a GMO labeling bill. February 2014.

Invited speaker at the "March on Monsanto" event in Eugene Oregon, May, 2014

Invited speaker for the Oregon Right to Know campaign, Deschutes County, Bend, Oregon. July 2014. "The Truth About GMOs".

Invited to Humboldt County California to give 3 interviews and 2 presentations to support a measure to prohibit the planting of GE crops, August 27-29, 2014.

Invited Panelist at the Colorado Citizens Initiative Review of Colorado's GMO labeling initiative, September 6, 2014

Invited speaker International Conference on, "Justice Begins with Seeds", Portland, Oregon September 2014. Presentation title: "The Disastrous GE Corn Biofuel Program."

Gave many presentations throughout Oregon during the YES on Measure 92 campaign to label GMO foods; (Fall, 2014) and in California, Colorado.

December 10, 2014: testified before Jackson County Commissioners public hearings on Ordinance 635, a measure to prohibit the planting of GE organisms in Jackson County.

Offered winter 2014 OLLI class on "Poisons In Our Home", with Julia R. Seidler. Southern Oregon University, Ashland Offered SOU OLLI course Jan. 2014, "In the know with GMOs."

Invited presentation at Southern Oregon University on United Nations recognition of Human Rights Day: "The coming inverse trifecta: Climate Change, Peak Oil, and 10 Billion People": 21st Century Challenges.

Invited participant Southern Oregon Our Family Farms Coalition public event Jan 29, 2015: Public updated on the County law suit against prohibiting the planting of GE crops.

Prepared expert witness declaration for the Jackson County Our Family Farms Coalition vs. alfalfa farmers and Monsanto law suit Federal District Court, trying to overturn the prohibition of planting and growing of GMO crops in Jackson County Oregon. Member and contributor to the BioSafety Alliance Coalition to plan an international conference. Sept.4,5 2015. Richmond, California: Soil Without Oil: soil sustainability and mitigating climate change.

May, 2015. Invited speaker at Bastyr University, Seattle, WA. to participate in the health and environmental effects GMO Symposium: "Do GMO practices endanger the environment and human health?"

May 2015. Invited speaker at the Southern Oregon Climate Action Now organization: "Is the Answer to Climate Change Beneath Our Feet."

June 2015 Invited presentations in Honduras: "What are Transgenic Foods and Why are They Controversial"; sponsored by the College of Science, Chemistry, and Pharmacy, National University of Honduras, Tegucigalpa, Honduras.

"Transgenic Crops as Our Foods" Socioeconomic, Legal, and Environmental Impacts"; presented to the Honduras National Academy of Microbiologists.

Invited presentation in Costa Rica: "Socioeconomic, Legal, and Environmental Consequences of Transgenic Crops"; presented at the Legislative Assembly Facility in San Jose, Costa Rica. June, 2015

August. 2015 Sign off approval on the Amicus Brief prepared by The Center for Food Safety in Vermont support the state's case that scientifically they are justified to have concerns with foods derived from GMO crops and they should be labeled.

Sept. 4,5 at the international Conference Soil Not Oil. Presented at Plenary Session V. "The Consequences of Soil With Oil". Presented at the GMO workshop session: "GMOs are a Planetary Disaster"

Member of "Advocates for Healthy Landscapes" Ashland Oregon. Goal is to convince the Ashland City Counsel to promote a voluntary ban on the probable/possible carcinogens glyphosate and 2,4-D.

Sept. 2015 Appeared on a 1-hr local t.v. interview show with co-supporter Kristina LeFever discussing why Ashland should support a glyphosate and 2,4-D voluntary ban.

Peer reviewer for supporting documents advising the prohibition of the GMO crops in parts of New Zealand.

Advisor/editor to Professor Shiva Ayyaudurai (MIT) on manuscripts and matters dealing with accumulation of formaldehyde within genetically engineered soybean tissue.

Prepared/co-authored a "Declaration" from the International Conference Soil Not Oil". See Facebook Page: scientist says no to GMOs Ray Seidler

Part of science team interviewed by the Hindu (The major newspaper in India) newspaper about the status of GMO crop regulatory issues in the U.S.

2015-2016 Collaborator/consultant to the development of GMOScience.org, a new on-line science magazine with professional and lay articles dealing with health and environmental aspects of GE crops.

Invited member of the advisory board of Our Family Farms, an Oregon nonprofit (501)(C3) that "educates, advocates and inspires farmers, policy makers and the community at large to support regenerative agricultural practices."

Testified before the Oregon Legislature in support of bill before the House Committee On Consumer Protection and Government Effectiveness HB4122. Feb. 2016.

Invited panelist/speaker at the conference, "Pesticides, People, Pollinators, and the Planet." April 16, 2016 at Southern Oregon University.

October, 2016. Presentation for GMO Free Josephine County. "Risky Business? What are some of the new GMO Products?

Jan. 2017. Discussed new and pending legislation affecting cultivation of GE crops in Oregon with several Oregon Legislators.

Feb., 2017 Presentation for GMO Free Jackson County, Bellview Grange. "Risky Business? Biotechnology Crops: What's Here, What's Coming, and Why You Should Care.

March, 2017 Statement before Talent City Counsel. "The Benefits of an Integrated Pest Management Program".

2017 and 2018 invited lecturer for the Southern Oregon Climate Action No nonprofit in their series on "Master Climate Protector Program. I discussed agriculture's role in climate change, regenerative agriculture, and soil health. April, 2017. Appeared before the Oregon legislature to support the following bills:

HB 2739, To protect Oregon's agriculture from cross pollination costs;

'HB2469 To restore farmer's rights, before the House Committee On Agriculture and Natural Resources;

SB1037 To restore farmer's rights; House Judicial and House Rules Committees

2016-2018 Wrote Articles for the Our Family Farms newsletter:

April, 2017. "Consolidations in Agricultural Biotech Companies" for Our Family Farms E-newsletter

Global Warming and Sustainable Agriculture. Applegater Magazine, Summer, 2017.

2017 Appointed to the board of Teton Wildlife Rehabilitation Center, a non-profit with the goal of "Increasing the chances of wildlife survival through rehabilitation and public education."

2017. Southern Oregon Climate Action Now Invited speaker: GHG Emissions and Pesticide Use in GMO-based Agriculture Are Killing the Planet.

September, 2017. Bellview grange Fall Equinox Community Event Hosted by the Bellview Grange and the Southern Oregon Pachamama Alliance: presented: "Why Our Food System Is Killing the Planet and What We Can Do About It."

2016-2017 Write monthly articles for Our Family Farms E-newsletter on pesticides, GMO agriculture, syn-bio products, and environmental impact topics.

2017 Ashland Mountain Meadows Community presentation: GHG Emissions and energy Use in Industrial GMO-based Agriculture.

Spring term, 2018: Submitted required curriculum documentation and received approval for new 8 week course offering at Southern Oregon University OLLI program: *Pesticides: From War Chemicals to our Garden to our Foods.*

January, 2018. Made invited presentation to the Josephine County Commissioners Study Session on how to regulate and reduce cannabis greenhouse placements on prime agricultural land.

2017-2018 Participated in numerous Non-Toxic Rogue Valley meetings with group of some 14 volunteers to regulate/reduce/eliminate use of toxic synthetic pesticides on public properties, including schools in Oregon and private HOAs in Ashland. 2018: Co-organized 6 month community education series for Our Family Farms entitled, "The Future of Soil". Approximately 20 participants including scientists, farmers, community members, and business people over 6 months.

2018 Re-appointed to the Our Family Farms Board of Directors and assigned to education and outreach activities dealing with regenerative agriculture.

October, 2018. Appointed to the Advisory Committee of Pollinator Project Rogue Valley, a non-profit having the goals of "envisioning safe, healthy, and thriving pollinator habitats for every community."

2018-2019 Co-organized two years of periodic community education presentations for Our Family Farms entitled, "The Future of Farming is Soil" and "The Future of Farming is Regenerative." Approximately 20 invited professional participants including scientists, farmers, community members, and business people. Approximately 500 total attendees.

2019 Invited advisor for non-profits: Pollinator Project Rogue Valley and Non Toxic Southern Oregon

2019 Co PI on two submitted USDA SARE research grant programs on topic of cover crop termination and regenerative agriculture

2019 taught 4 hr short course on theory and practices of regenerative agriculture.

2019 Wrote and published a Guest Opinion article in local newspapers on topic of roadside pesticides

2019 several short presentations on topics of pesticide use by Jackson County to the County commissioners

Dec. 2019 Short presentation to the Jackson County Public Health Advisory Committee on topic of roadside pesticides

2020-2022. Technical Advisor to Non-Toxic Rogue Valley and Pollinator Project of Rogue Valley. Education and outreach topics about the prolific use of toxic pesticides in our County including in our public schools. Presentations made before county commissioners and other citizen groups.

2020. Guest lecture for the "Master Climate Protector Program of the Southern Oregon Climate Action Now, non-profit. Title: "The role of regenerative agriculture in sequestering carbon dioxide emissions. How the homeowner gets involved."

2020 Member of Ashland Bellview Grange and its Legislative Advisory Committee.

2020-2022. Technical Advisor to Our Family Farms leadership board.

2020. Member of Steering Committee, Cultivate Oregon

2020 Recognized recipient Albert Nelson Marquis Lifetime Achievement Award.

2020 Chair Symposium Committee, "Enabling Regenerative Agriculture: Getting Paid for Improving Soil Health", Virtual event of Nov. 10 and 17, see details at <u>https://www.cultivateoregon.org/</u> <u>soil_symposium_program_schedule</u> Twelve speakers including international and state agency representations from Washington, California and Oregon, over two day period.

2021. Began Collaboration with Jan Lee, Executive Director of the Oregon Association of Conservation Districts with various topics dealing with carbon sequestration on working lands projects in Oregon.

2021. Prepared a 77 page digital resource guide summary of the symposium mentioned above entitled, "Enabling Regenerative Agriculture: Getting Paid for Improving Soil Health". See it here : https://drive.google.com/file/d/ 106RiJXvg7wxuKrk4_pDBZ3LV28dEpxLG/view

2021. Guest lecture for the "Master Climate Protector Program of the Southern Oregon Climate Action Now, non-profit. Title: "The role of regenerative agriculture in sequestering carbon"

2022. Guest lecture for Friends of Family Farmers. "Why Healthy Soil? Options, options, options \$\$\$".

2022. Guest lecture for the "Master Climate Protector Program of the Southern Oregon Climate Action Now, non-profit. Title: "What is regenerative agriculture and how does it mitigate climate change?"

2022. Invited presentation for Ashland Garden Club, "How can you participate in mitigating climate change through regenerative agriculture?"

2022. Invited speaker for: "Winter Dreams Summer Gardens" sponsored by the Jackson County Master Gardener Association.

Options, options, options \$\$\$



Dr.Seidler lecturing in the classroom