

Curriculum Vitae
José A. Centeno, M.Sc., Ph.D., FRSC

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Contact Information:

- Business Phone Number (Mobile): (301) 502-8846
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- Languages:
 - Native: Spanish
 - Fluent & Proficient: English

Education:

- Ph.D. (12/1987), Physical Chemistry, Michigan State University, East Lansing, MI
 - **PhD thesis dissertation:** "Hydrogen Bonding Interactions of Cytochrome *a* in Cytochrome Oxidase: A Resonance Raman Study" (Professor Gerald T. Babcock, Thesis advisor).
- M.Sc. (7/1981), Physical Chemistry, University of Puerto Rico at Mayaguez, Mayaguez.
 - **MSc thesis dissertation:** "Laser Raman Spectroscopic Study of Saccharide-Induced Conformational Transitions on Lectins from Concanavalin A and *Ricinus Communis*. (Professor TC Jao, Thesis advisor)
- B.S. (6/1979), Chemistry, University of Puerto Rico at Mayaguez, Mayaguez, PR. A
 - **BS thesis research project:** "Applications of Laser Raman Spectroscopy to Study Charge-Transfer Transitions in Benzene-Halogen Adducts" (Professor TC Jao, Advisor).

Post Graduate Education and Training:

- Postdoctoral Research Associate, American Registry of Pathology, Armed Forces Institute of Pathology, Washington, DC. (August 1988 – December 1989; Dr. Timothy O'Leary, Mentor).
- Training Course on "Applications of Lasers in Biomedical Research". Sponsored by the University of Pennsylvania Laser Facility, June 15-17, 1988.
- Symposium (training) on "New Developments and Applications of Ultra-Fast Lasers". Sponsored by the University of Puerto Rico and the National Science Foundation. June 1987.
- Training Course on "Defense Hazardous Materials/Hazardous Waste Handling". Sponsored by United State Army, Logistics Management College. March 5-9, 1990.
- Seminar (training) on "Executive Environmental and Hazardous Materials Seminar". Sponsored by the United States Army, Logistics Management College. November 15, 1990.
- Workshop (training) on "Toxicologic Pathology". Sponsored by the National Academy of Sciences, Washington, DC, February 9-10, 1993.
- Continuing Education Courses on "Lasers in Surgery". Sponsored by the Uniformed Services University of the Health Sciences, Bethesda, MD. Credit Hours = 5.5; 1995, 1996, 1997.
- Training course on "Medical Management of Chemical and Biological Casualties (6H-F26)". Sponsored by the Walter Reed Army Medical Center and organized by the US Army Research Institute of Chemical Defense, Washington, D.C., 12-14 December 2005.
- Supervisory training: "National Security Personnel System and Performance Management for Supervisors", Office of Personnel Management, Washington, DC, April 2007.

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- Supervisory Development Training (SDS 1 and SDS2), “Learning to Lead”, Office of Personnel Management, Washington DC (80 hours), December 2016.
- Six Sigma for Managers, Yellow Belt, OSEL/CDRH/USFDA. November 2017.
- Executive Leadership Development Program. Center for Devices and Radiological Health – USFDA. May 2019.

Employment History:

- Academic Appointments:
 - **Assistant Professor** of Physical and Inorganic Chemistry, Department of Chemistry, University of Puerto Rico a Mayaguez, August 1987 – December 1989.
- Other Employments:
 - **Division Director and Senior Manager**
 - Division of Biology, Chemistry and Materials Science, Office of Science and Engineering Laboratories, Center for Devices and Radiological Health, US Food and Drug Administration, Health and Human Services Department. July 2015 - December 2019.
 - **Senior Research Scientist and Division Director**
 - Division of Biophysical Toxicology, Embedded Fragment and Depleted Uranium Program, Joint Pathology Center, National Walter Reed Medical Center, Andrews Airforce Base, Malcolm Grow Hospital, MD. July 2011 – July 2015.
 - **Senior Research Scientist and Division Director**
 - Division of Biophysical Toxicology, Depleted Uranium Laboratory, Department of Environmental and Infectious Disease Sciences, Armed Forces Institute of Pathology, Walter Reed Army Medical Center, Washington DC. January 1997- July 2011.
 - **Senior Research Scientist and Branch Chief**
 - Bioinorganic and Trace Metal Toxicology Lab, Department of Environmental and Infectious Disease Sciences, Armed Forces Institute of Pathology, Walter Reed Army Medical Center, Washington, DC. December 1989 January 1997.

Professional Society Membership:

- Regular Member, Society of Toxicology (2020).
- Honorary Academician, Royal Academy Medicine and Surgery, Andalusia Oriental, Spain (2017)
- Fellow, Royal Society of Chemistry, London, UK (2007 – present)
- Co-Founding Member and Past President, International Medical Geology Association (2006 – present).
- Associate Member, Society of Toxicologic Pathologists (1996-2003)
- Regular Member, Biophysical Society (1989-2000)

Honors and Awards:

- Establishment of “**Jose A. Centeno International Centre for Medical Geology Research**”, Nasarawa State University, Keffi, NIGERIA (2020 – present)
- Center for Devices and Radiological Health Excellence in Scientific Research Award, Member Nickel Research Group (June 29, 2018), USFDA.
- USFDA Group Recognition Award, Member Biological Response to Metal Implants Working Group (June 2017).

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- USFDA Group Recognition Award, Member Leukoreduction Filter Recall Team (June 2017).
- Jackson State University Visionary Leadership Award, Environmental Health Symposium, Jackson, Mississippi, September 2016.
- Exceptional Civilian Award Service, Department of the Army, National Capital Region Medical Directorate, Washington, DC, June 2015.
- Certificate of Appreciation – Exceptionally Meritorious Service and Federal Civilian of the Department of Defense, Joint Task Force National Capital Region Medical, Joint Pathology Center (2014)
- Special Achievement Award, National Capital Region Medical Directorate, Defense Health Agency (2012).
- Special Recognition Award for contributions in Science, Technology, Engineering and Mathematics, Metropolitan University, San Juan, Puerto Rico. Commencement Ceremonies: June 17, 2008.
- Distinguished Service Recognition Award from Jackson State University, 5th International Symposium on Recent Advances in Environmental Health Research. September 15-17, 2008.
- Excellence Award on Research, 3rd Annual Research and Sponsored Programs, Jackson State Univ., Jackson, Mississippi (2005).
- Superior Civilian Service Award (GS-15), Armed Forces Institute of Pathology, Washington, DC (July 2003-2004).
- Distinguished Professor, University of Turabo, Caguas, Puerto Rico (June 2003).
- Most Exceptional Performance Award (GS-15; July 2001-2002) Armed Forces Institute of Pathology, Washington, DC (July 2001-2002).
- Distinguished Alumni, University of Puerto Rico-Mayaguez (June 1999).
- Civilian Employee of the Year (GS13 & above), Armed Forces Institute of Pathology, Washington, DC (1995-1996).

Administrative Services:

- **Institutional Service**
 - 2006-2007 Army Expert Witness, District Attorney for the County of San Diego, CA
 - 2015-2019 Voting Member - CDRH-OSEL Peer-Review and Promotion Committee
 - 2016 – 2019 CDRH Business Representative (Alternate) - FDA Global Substance Registration System (GSRS) – Technical Control Board
 - 2017-2019 CDRH Representative and Voting Member - FDA Nano-Task Force
 - 2017 -2019 FDA-CDRH Delegate to the US Pharmacopeial Convention (USP)
 - 2018-2019 CDRH Management Team on “Biological and Immune Response to Metals” Working Group.
 - 2019 Member - CDRH Regulatory Science Subcommittee
 - 2019 Member, Interagency Working Group on Asbestos in Consumer Products (IWGACP)
- **Local and National Service**
 - 1993-1995 **External Reviewer** for the DOE-National Renewable Energy Laboratory, Golden, CO
 - 1995-2011 **Member**, Presidential Advisory Board for Sciences, Math, Engineering and Health, Ana G. Mendez University System (AGMUS), Puerto Rico.
 - 1998-2000 **Member (Alternate)**, TOSCA Interagency Testing Committee, U.S. EPA, Washington, DC.
 - 2000 **Member Scientific Organizing Committee**, *First Workshop on Aluminum in Vaccines*, May 11-12, 2000. Sponsored by National Vaccine Program, CDC, AFIP, FDA.

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- 2003 **Committee Member**, CDR/MERC Study Session, U.S. Agency for International Development, Bureau for Economic Growth, Agriculture and Trade. March 2003.
- 2004-2005 **Member**, National Academies, National Research Council Committee on Earth Materials and Health – Research Priorities on Earth Science and Public Health. August 2004 – December 2005
- 2005-2007 **Member**, DoD Biomonitoring Working Group, Force Health Protection and Readiness Program.
- 2006, 2007 **Member**, National Institutes of Health Study Sessions on Gene and Drug Delivery Systems (02/2007) and Biomaterials and Biointerfaces (Bioengineering Sciences and Technologies Integrated Review Group) (02/2006).
- 2006-2008 **Grant reviewer** for: NIH-Minority Biomedical Research Support, American Chemical Society-Petroleum Research Fund, International NSF, Office of Women's Health-FDA
- 1997 **Member**, External Advisory Committee, Jackson State Univ. Center for Environmental Health funded by NIH Minority Biomedical Research Support Program (MBRS).
- 1998 - Present **Editorial Services on Journals and Books:**
 - *Member*, Editorial Board of *Biological Trace Element Research* (1998)
 - *Member*, Editorial Board of *International Journal of Environmental Research and Public Health* (ISSN 1660-4601) (2003-present).
 - *Member*, Editorial Board of *Environmental Health Focus Journal* (2004).
 - *Member*, Editorial Board of *Environmental Toxicology* (2005-present).
 - *Member*, Editorial Board of *Journal of Environmental Monitoring* (2006-Dec 2009).
 - *Member*, Editorial Board of *Journal of Cancer* (2009-2011)
 - Senior Editor, *Metal Ions in Biology and Medicine Vol. VI* (May 2000), John Libbey Eurotext, Paris.
 - Associate Editor, *Metal Ions in Biology and Medicine Vol. VIII & IX* (2004, 2006), John Libbey Eurotext, Paris
 - Associate Editor, *Essentials of Medical Geology*, Elsevier-Academic Press (2005).
 - Associate Editor, *Metal Contaminants in New Zealand*, resolutionz Press, New Zealand (2005)
 - Guest Editor for Special Journal Issues:
 - *Environmental Geochemistry and Health* – Special Issue on “Medical Geology in Developing Countries”, 2007 & 2008 (Selinus O, Finkelman RB, **Centeno JA**, Guest Editors)
 - *International Journal of Environmental Research and Public Health* – Special Issue on “Recent Advances on Environmental and Toxicologic Pathology” (2014).
 - *Journal of Geosciences* – Special Issue on “Medical Geology – Impacts of the Natural Environment on Human Health” (2014).
 - Manuscript reviewer for: *Spectrochimica Acta*, *Biological Trace Element Research*, *Toxicologic Pathology*, *American Journal of Obstetrics & Gynecology*, *International Journal of Coal Geology*, *Journal of Toxicology-Clinical Toxicology*, *Environmental Health Perspectives*, *Environmental Toxicology*, *International Journal of Molecular Sciences*, *Environmental Geochemistry and Health*, *Environment International*,

Analytical and Bioanalytical Chemistry, Archives of Pathology and Laboratory Medicine

- 2018 **Member**, Planning Committee, Conference on “Connections between Soil Health and Human Health”. Silver Spring, MD October 16-17, 2018.
- **International Service**
 - 2016 - 2019 **FDA Liaison to International Standards Organization** – USTAG/ISO TC 229 – Nanotechnologies (Chair, USTAG/ISO TC 229 Nanotechnologies Working Group 5 – “Products and Applications”).
 - 2000 -2005 **Health Team Leader**, Joint U.S. Geological Survey - Armed Forces Institute of Pathology Reconnaissance Field Evaluation Team. Invited by Philippine Congressman Edmund Reyes to provide an independent scientific evaluation of environmental and health issues of mining-related activities in Marinduque Island. May 2000 – July 2005.
 - 2007-2009 **Member**, Development Committee, UNESCO-International Union of Geological Sciences, *International Year of Planet Earth*.
 - 2005 **Member**, USA – Ukrainian Environmental and Health Team, Assessment of Mercury Exposure in Gorlovka, Ukraine.
 - 2004 **William Evans Visiting Fellow**, University of Otago, School of Public Health, Wellington, New Zealand (February 2004).
 - 2004-2010 **Officer**, Commission on Geoscience for Environmental Management (GEM), International Union of Geological Sciences (IUGS).
 - 1999 **Member and Section Author**, Working Group - International Agency for Research on Cancer Working Group, Monograph Series, Vol. 74, “Foreign Bodies, Surgical Implants and Prosthetic Devices” Lyon, France.
 - 2000 **Chairman**, 6th International Symposium on Metal Ions in Biology and Medicine, San Juan, PR. May 7-10, 2000
 - 2004 **Member**, Federation of European Societies on Trace Elements and Minerals, GMS Society.
 - 2006 **Co-Founding Member and Past President** (2008-2010), International Medical Geology Association (<http://www.medicalgeology.org>).
 - 2005 – Present **Founder and Co-Chairman**, *International Conference Series on Medical Geology*. 2005 (San Juan, PR), 2007 (Sao Paulo, Brazil), 2009 (Montevideo, Uruguay), 2011 (Bari, Italy), 2013 (Alexandria, USA), 2015 (Aveiro, Portugal), 2017 (Moscow, Russia), 2019 (Xinjiang, China), 2021 (Alicante, Spain).

Teaching Service:

- **Short Courses (with CME credit hours):**
 - 1991- Director and Lecturer. Armed Forces Institute of Pathology sponsored workshop on “Modern Methods for Spectroscopy, Spectrophotometric and Crystallographic Analysis”. Univ. of Puerto Rico at Cayey and Mayagüez campuses. CME Credit Hours = 3.5.
 - 1993 Director and Lecturer. Workshop on “Atomic Absorption Spectrometry”, Universidad Metropolitana, Ana G. Mendez University System. CME Credit Hours = 5.5
 - 1994 Director and Speaker. Course on “Analytical Techniques in Environmental

Toxicology” sponsored by the Armed Forces Institute of Pathology (AFIP). Ponce School of Medicine, Ponce, Puerto Rico. CME = 12.5 credit hours. September 1-4, 1994.

- 1995 Lecturer at a workshop in Piedras Negras, Mexico (August 28-30, 1995) sponsored by the US-Geological Survey and the Consejo de Recursos Minerales in Pachuca, Mexico. Workshop title: “Trace Elements in Coal: Environmental and Health Significance of Coal Utilization”.
- 1997 Director and Lecturer of two AFIP/ARP sponsored CME Courses:
 1. "Analytical and Molecular Biological Techniques in Environmental Pathology and Toxicology" August 18 - 20, 1997, CME Credit Hours = 23.5 (27 with lab).
 2. "Metals in Environmental Health and Disease: Chemical Analysis and Biological Monitoring of Metal Exposures" October 6 - 8, 1997, CME Credit Hours = 25
- 1998 Speaker. AFIP & USGS Workshop: “Environmental and Human Health Research Workshop. Sponsored by the USGS and AFIP. May 12-13, 1998.
- 1999 Lecturer. Armed Forces Institute of Pathology (AFIP) (CME) Workshop: “Workshop on Environmental Pathology and Toxicology ’99: Environmental and Health Effects of Trace Elements and Metal Ions”. CME=12.4 credit hours. Jackson State University, Mississippi. April 29-30, 1999.
- 2000 Lecturer. AFIP/USGS Workshop titled: “Metal Ions in Environmental Health and Disease”, VI-International Symposium on Metal Ions in Biology and Medicine, San Juan, Puerto Rico, May 7-10, 2000.
- 2000 Director and Lecturer. AFIP/USGS Course titled: “Metals, Health and the Environment”, University of Puerto Rico-Mayaguez. November 15-17, 2000.
- 2000 Lecturer. AFIP/USGS Course titled: “Metals, Health and the Environment”, University of Canterbury, Christchurch, New Zealand. December 4-5, 2000.
- 2001 Lecturer. AFIP/USGS sponsored training course titled: “Metals, Health and the Environment”, University of Zambia, Lusaka, Zambia. June 26-29, 2001.
- 2001 Lecturer. AFIP/USGS/University of Witwatersrand course titled: “Coal and Trace Elements: Human Health Issues”, University of Witwatersrand, Johannesburg, South Africa. July 3-4, 2001.
- 2001 Lecturer. AFIP/USGS/Servicio Geologico Argentino sponsored workshop titled: “Effects of Mining: Environmental, Human Health and Ecological Risk Analysis”, Servicio Geologico Argentino, Buenos Aires. September 10-14, 2001.
- 2001 Lecturer. Workshop on: “Environmental Toxicology and Pathology: Trace Elements and Human Health”, Canterbury Health Laboratories, Christchurch, New Zealand. November 28-29, 2001.
- 2001 Lecturer. Workshop on: “Environmental Toxicology and Pathology of Exposure to Toxic Trace Elements” University of Otago, Wellington School of Medicine and Ecology Health Center, Wellington, New Zealand. December 4, 2001.
- **Adjunct Professorship Appointments held**
 - Adjunct Professor of Medicine, University of Maryland School of Medicine, Division of Occupational and Environmental Medicine (June 2020 – present)
 - Chair on Medical Geology, Nasarawa State University, Keffi, NIGERIA (2020-present)

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- Professorial Lecturer of Environmental and Occupational Health, George Washington University, Washington, DC (2003-2005)
- Visiting Professor of Chemistry, Chemistry Faculty, University of the Republic of Uruguay, Montevideo, Uruguay (2007-2009)
- Distinguished Professor, Turabo University, Caguas, Puerto Rico (June 2003)
- Guest Professorship, China University of Mining and Technology, Beijing, China (November 2002)
- **Professional Advisory and Consulting Activities**
 - Master and Doctoral Theses Reviewed:
 1. *Vahidnia, Ali* (PhD Candidate), Molecular Biology and Metal Toxicology, 2008. Thesis title: "Studies into the mechanism of arsenic-induced neurotoxicity". Leiden University Medical Center, Toxicology Laboratory, Leiden, The Netherlands.
 2. *Pearce, Dora Claire* (PhD Candidate), Geochemistry and Health, 2008. Thesis title: "Geology, geography and cancer: Is there a connection in the goldfields region of Victoria, Australia?" School of Science and Engineering, University of Ballarat, Ballarat, Australia.
 3. *Ljung, Karin* (PhD Candidate, Geochemistry and Health, 2006). Thesis title: "Metals in Urban Playground Soils – Distribution and Bioaccessibility". Swedish University of Agricultural Sciences, Uppsala, Sweden.
 4. *Gray, MA* (PhD Candidate, Epidemiology, 2004). Thesis title: "The Wellington Region Community Prostate Study". Department of Public Health, Wellington School of Medicine & Health Sciences Wellington, New Zealand.
 5. *Moalem, Sharon* (PhD Candidate, Molecular Biology, 2003). Thesis title: "The involvement of hereditary hemochromatosis mutations (C282Y & H63D) in familial Alzheimer disease and Parkinson Disease and their purported origins through epidemic pathogenic selection". University of Toronto, Canada, 2003.
 6. *Abdulla Hussein, Mirham* (MS Candidate, Immunology, 2002). Thesis title: "Histological and immunological responses associated with susceptibility and resistance of *Biomphalaria alexandrina* to *Schistosoma mansoni* infection". Cairo University, Faculty of Science, Egypt.
 - Consulting Activities:
 1. US Food and Drug Administration: "Analysis of silicone and Characterization of Bioimplantable Materials" (1994-1996).
 2. Agency for Toxic Substances and Disease Registry, Atlanta GA: "Interpretation of Lead Analysis from an Environmental Landfill in Puerto Rico" (1995).
 3. Office of Women's Health, US Food and Drug Administration, Department of Health and Human Services. "Silicone Implants & Children's Health Workshop", Washington, D.C. February 8, 2000.

Grant Support:

- **Active Grants**
 - 2015-2021 (Co-PI, 10%)
"Health Effect of Embedded Fragments of Military-Relevant Metals"
 (Kalinich JW (PI), McDiarmid M (Co-PI), Centeno JC (Co-PI). Funded by the Focused Program Award Peer-Reviewed Medical Research Program of the Congressionally Directed Medical Research Program. Annual direct costs: \$100,000/year; Total direct cost: \$380,000
- **Completed Grants/Projects**
 - 2008-2010 (Co-Pi, 10%) Project completed.
"Acute effects of oral exposure to Middle East PM10 dust on systemic or

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- immunological parameters in laboratory mouse (Mus musculus)*". Wagner D, Chapman GD, Stockelman M, Mokashi V, Ortiz P, **Centeno JA**. Status: Funded by the Navy Environmental Health Effects Laboratory, WPAB, Ohio.
- 2008-2010 (Co-PI, 10%)
"Tissue distribution of tungsten in mice following oral exposure to sodium tungstate". Mokashi V, Stokelman M, Chapman G, Ortiz P, **Centeno JA**. Status: Funded by the Navy Environmental Health Effects Laboratory, WPAB, Ohio. Project completed.
 - 2000 – 2002 (Co-PI; 10%)
"Effects of Low-Dose Cadmium on Prostate Cells." Jonas WB (PI), Waalkes M (Co-PI), **Centeno JA** (Co-PI). Status: Funded by NIH R21/CPA III Project; Project Completed.
 - 2000 – 2002 (Co-PI)
"Histopathologic and Laser Raman Microprobe Analysis of Regional Lymph Nodes from Patients with Silicone Breast Implants." Centeno JA (PI), Katzin WE (Co-PI), Feng LJ (Co-PI), Mullick FG (Co-PI). Status: Funded by AFIP and Mount Sinai Medical Center. Project Completed.
 - 2001 -2002 (Co-PI; 10%)
"Sarcoidosis and Occupational Lung Disease Quality Assurance Project." Gorham ED (PI), Garland F (Co-PI), **Centeno JA (Co-PI)**, Travis WF (Co-PI), Abraham J (Co-PI). Status: Funded by Navy Health Research Center; Project Completed.
 - 2000 – 2001 (Co-PI; 10%).
"Comparison of Fresh and Paraffin-embedded Tissue for Measurement of Hepatic Iron Concentration in Subjects with Hepatic Steatosis." Wong P (PI), Goodman Z (Co-PI), **Centeno JA (Co-PI)**. Status: Funded by American Registry of Pathology; Completed).
 - 1999 – 2005 (PI, 20%)
"Development of the International Tissue and Tumor Registry on Chronic Arsenosis in Humans." Centeno JA (PI), Gibb H (Co-PI), Thompson C (Co-PI), Longfellow D (Co-PI). Interagency agreement funded between the USEPA, NCI, and NIEHS. (Status: Completed).
 - 2005 – 2007 (PI; 20%)
"Cadmium, Zinc and Selenium Levels in Carcinoma of the Human Prostate" Centeno JA (PI), Gray M (Co-PI), Todorov TI (Co-PI), Andrey Sarafanov (Co-PI). Funded by American Registry of Pathology; Project completed.
 - 2005 – 2007 (PI; 20%)
"Reliability of the Determination of Cadmium, Zinc, and Selenium Levels in Paraffin Embedded Prostate Tissue" Centeno JA (PI), Gray M (Co-PI), Todorov TI (Co-PI), Andrey Sarafanov (Co-PI). Funded by American Registry of Pathology and DoD Prostate Cancer Program. Project completed.
 - 2005 – 2007 (Co-PI, 10%)
"Feasibility of Assessing Health Risks From Long-Term Mercury Exposure in Golovka, Ukraine". Kolker A (PI), Centeno JA (Co-PI), Gibb H (Co-PI). Status: Funded by US Geological Survey; Project completed.

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Publications:

Peer-reviewed journal articles

1. Todorov, T.I.; de Bakker, E.; Smith, D.; Langenberg, L.C.; Murakata, L.A.; Kramer, M.H.H.; **Centeno, J.A.**; Nanayakkara, P.W.B. A Case of Silicone and Sarcoid Granulomas in a Patient with “Highly Cohesive” Silicone Breast Implants: A Histopathologic and Laser Raman Microprobe Analysis. *Int. J. Environ. Res. Public Health* **2021**, *18*, 4526. <https://doi.org/10.3390/ijerph18094526>.
2. Smith DE, Todorov T, Defante AP, Hoffman JF, John F. Kalinich JF, and **Centeno JA**. Spectroscopic and Spectrometric Approaches for Assessing the Composition of Embedded Metals in Tissues. *Appl Spectrosc* **2021**; DOI: 10.1177/0003702820979748.
3. McDiarmid MA, Gucer P, **Centeno JA**, Todorov T, Squibb KS. Semen Uranium Concentrations in Depleted Uranium Exposed Gulf War Veterans: Correlations with Other Body Fluid Matrices. *Biol Trace Elem Res* 2019; 190(1): 45-51. doi: 10.1007/s12011-018-1527-3.
4. Haddad MR, Choi E-Y, Zervas PM, Yi L, Martinelli D, Sullivan P, Goldstein DS, **Centeno JA**, et al. Cerebrospinal Fluid-Directed rAAV9-rsATP7A Plus Subcutaneous Copper Histidinate Advance Survival and Outcomes in a Menkes Disease Mouse Model. *Molecular Therapy: Methods & Clinical Development* 2018;10: <https://doi.org/10.1016/j.omtm.2018.07.002>.
5. Kumsa D, Steinke GK, Molnar GF, Hudak EM, Montage FW, Kelly SC, Untereker DF, Shi A, Hahn BP, Condit C, Lee H, Bardot D, **Centeno JA**, Krauthamer V, Takmakov PA. Public Regulatory Database as a Source of Insight for Neurostimulation Devices Stimulation Parameters. *Neuromodulation* 2017. E-pub ahead of print. doi:10.1111/ner.12641.
6. Gaitens J, Condon M, Squibb K, **Centeno JA**, McDiarmid M. Metal Exposure in Veterans with Embedded Fragments from War-related Injuries: Early Findings from Surveillance Efforts. *J Occup Environ Med* 2017;59(11): 1056-1062. doi: 10.1111/ner12641.
7. Gaitens J, **Centeno JA**, Squibb K, Condon M, McDiarmid M. Mobilization of metals from retained embedded fragments in a blast-injured Iraq War Veteran. *Military Medicine* 2016;181:e625-e629.
8. McDiarmid MA, Gaitens JM, Hines S, Condon M, Roth T, Oliver M, Gucer P, Brown L, **Centeno JA**, Dux M, Squibb KS. The US Department of Veterans’ Affairs Depleted Uranium Exposed Cohort at the 25 Years: Longitudinal Surveillance Results. *Environmental Research* 2016;175-184.
9. McDiarmid MA, Gaitens JM, Hines S, Condon M, Roth T, Oliver M, Gucer P, Brown L, **Centeno JA**, Streeten E, and Squibb KS. Biologic monitoring and surveillance results for the Department of Veterans Affairs’ Depleted Uranium Cohort: Lessons learned from sustained exposure over two decades. *Am J Ind Med* 2015;58(6): 583-594. Doi: 10.1002/aji.22435.
10. **Centeno JA**, Rogers DA, van der Voet GB, Fornero E, et al. Embedded fragments from U.S. Military Personnel – Chemical Analysis and Potential Health Implications. *Int J Environ Res Public Health* 2014;11:1261-1278. doi:10.3390/ijerph110201261.
11. Kalinich JF, Vane EA, **Centeno JA**, Gaitens JM, Squibb KS, McDiarmid MA, Kasper CE. Embedded Metal Fragments. *Annu Rev Nurs Res* 2014;32:63-78. doi:10.1891/0739-6686.32.63.
12. Haddad MR, Patel KD, Sullivan PH, Goldstein DS, Murphy KM, **Centeno JA**, Kaler SG. Molecular and biochemical characterization of Mottled-dappled, an embryonic lethal Menkes disease mouse model. *Mol Genet Metab* 2014;113(4):294-300. <http://dx.doi.org/10.1016/j.ymgme.2014.10.001>.
13. Todorov TI, Ejnik JW, Guandalini G, Xu Hanna, Hoover D, Anderson L, Squibb K, McDiarmid MA, **Centeno JA**. Uranium quantification in semen by inductively coupled plasma mass spectrometry. *J Trace Elem Med and Biol* 2013;27:2-6.
14. McDiarmid MA, Gaitens JM, Hines S, Breyer R, Wong-You-Cheong JJ, Engelhardt SM, Oliver M, Gucer P, Kane P, Cernich A, Kaup B, Hoover D, Gaspari AA, Liu J, Harberst E, Brown L, **Centeno JA**, Gray PJ, Xu H, Squibb K. The Gulf War depleted uranium cohort at 20: Bioassay results and novel approaches to fragment surveillance. *Health Phys* 2013;104(4):347-361. Doi:10.1097/HP.0b013e31827b1740.

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15. Conko KM, Landa ER, Kolker A, Kozlov K, Gibb HJ, **Centeno JA**, Panov BS, Panov YB. Arsenic and mercury in soils of an industrial city in the Donets Basin, Ukraine. *Soil & Sediment Contamination* 2013;22:574-593. Doi:10.1080/15320383.2013.750270.
16. Taylor K, Foster ML, McHugh Law J, **Centeno JA**, Fornero E, Henderson Jr S, Trager SA, Stockelman MG, Dorman DC. Assessment of geographical variation in the respiratory toxicity of desert dust particles. *Inhal Toxicol* 2013;25(7):405-416. Doi: 10.3109/08958378.2013.797524.
17. Hines SE, Gucer P, Kligerman S, Breyer R, **Centeno JA**, Gaitens J, Oliver M, Engelhardt S, Squibb K, McDiarmid M. Pulmonary Health Effects in Gulf War I Service Members Exposed to Depleted Uranium. *J Environmental and Occupational Medicine (JOEM)* 2013;55(8):937-944. Doi: 10.1097/JOM.0b013e31829176c7.
18. Dorman DC, Mokashi V, Wagner DJ, Olabisi AO, Wong BA, Moss OR, **Centeno JA**, Guandalini G, Jackson DA, Dennis WE, Lewis JA, Thomas RS, Chapman GD. Biological response in rats exposed to cigarette smoke and Middle East sand (dust). *Inhal Toxicol* 2012;24(2)109-1024.
19. Squibb KS, Gaitens JM, Engelhardt S, **Centeno JA**, Xu H, Gray P, McDiarmid M. Surveillance for long-term health effects Associated with depleted uranium exposure and retained embedded fragments in US veterans. *J Occup and Environ Medicine* 2012;00(00);1-9. DOI: 10.1097/JOM.0b013e31824fe138.
20. Maity JP, Nath B, Chen C-Y, Banerjee S, Jean J-S, Liu M-Y, **Centeno JA**, Bhattacharya P, Chang CL, Cantra SC. Arsenic-induced health crisis in peri-urban Moyna and Ardebok villages, West Bengal, India: An exposure assessment study. *Environ Geochem & Health* 2012. DOI: 10.1007/s10653-012-9458-y. ISSN 0269-4042.
21. Haddad MR, Macri CJ, Holmes CS, Goldstein DS, Jacobson B, Lockitch G, **Centeno JA**, Horn N, Gahl WA, Kaler SG. In Utero copper treatment for Menkes disease associated with a severe ATP7A mutation. *Mol Genet Metab* (2012), doi:10.1016/j.ymgme.2012.05.008.
22. Gray PJ, Zhang L, Xu H, McDiarmid M, Squibb K, **Centeno JA***. Determination of 236U/238U and 235U/238U isotope ratios in human urine by inductively coupled plasma mass spectrometry. *Microchemical Journal* 2012; 105: 94-100.
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24. Sarafanov A, Todorov T, **Centeno JA**, Macias V, Gao W, Liang W-M, Beam C, Gray M, Kajdacsy-Balla A. Prostate Cancer Outcome and Tissue Levels of Metal Ions. *Prostate* 2011;1-8. DOI 10.1002/pros.21339.
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16. Jackson LW, Dennis GJ, **Centeno JA**. Analytical Determination of Blood Silicon Levels in Patients with Silicone Breast Implants. In *Metals in Biology and Medicine 1998; Vol. 5th;33-38*. (Editors: Collery P, Bratter P, Negretti de Bratter V, Khassanova L, Etienne JC), John Libbey Eurotext, Paris. ISBN: 2-7 420-0214-6.
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19. **Centeno JA**, Pestaner JP, Nieves S, Ramos M, Mullick FG, Kaler SG. The Assessment of Trace Elements and Toxic Metal Ion Levels in Human Placental Tissues. *In Metal Ions in Biology and Medicine 1996*; Vol. 4th; 522-524. (Editors: Collery P, Corbella J, Domingo JL, Etienne JC, Llobet JM), John Libbey Eurotext, Paris. ISBN: 2-7420-0130-1.
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27. **Centeno JA**: Resonance Raman difference spectra of cytochrome a in cytochrome c oxidase: Excitation in the 605nm absorption region. *In XII International Conference on Raman Spectroscopy* (Eds. Durig JR, Sullivan JF) John Wiley & Sons, New York, NY. pp 662-664, **1990**. ISBN: 0 471 92785 6.
28. **Centeno JA**, Finkelman RB, Selinus O. Editorial: Medical Geology: Impacts of the Natural Environment on Public Health. *Geoscience* 2016;6(1):8.

Other Brief Communications (special journal issues, editorials, special reports, monographs, etc):

1. Finkelman RB, **Centeno JA**. Guizhou Province, China: The Birthplace of Modern Medical Geology. *Acta Geochim* 2020. <https://doi.org/10.1007/s11631-019-00380-8> (On-line publication).
2. **Centeno JA**. Special Issue on "Recent Advances on Environmental and Toxicologic Pathology" *Int J Environ Res and Public Health* 2014.
3. **Centeno JA**. Special Issue on "Medical Geology – Impacts of the Natural Environment on Human Health" *J Geosciences* 2014.
4. Selinus O, Finkelman RB, **Centeno JA**, Cave M. Medical Geology – The European Perspective. *Central European Geology* 2009;51(2):1-19. DOI: 10.1556/CeuGeol.51.2008.1.1.
5. **Centeno JA**. Natural disasters and their long-term impacts on the health of communities. *J Environ Monit* 2008;10;266.
6. Finkelman RB, **Centeno JA**, Selinus O. Medical Geology – Threat or Opportunity. *AIPG* 2008;46-49.
7. **Centeno JA**. Impacts of the natural environment on human health. *Interciencia* 2008;33(3)169-171.
8. Finkelman RB, **Centeno JA**, Selinus O. Medical Geology – The Emergence of a New Discipline. *Terrae* 2007;2(2):3-8.

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10. Selinus O, Finkelman RB, **Centeno JA.** The Medical Geology Revolution. *Geosciences* 2007;5:108-109.
11. Plumlee GS, Morton RA, Boyle TP, Medlin JH, **Centeno JA.** An Overview of Mining-Related Environmental and Human Health Issues, Marinduque Island, Philippines: Observations from a Joint U.S. Geological Survey – Armed Forces Institute of Pathology Reconnaissance Field Evaluation. May 12-19, 2000. U.S. Geological Survey Open-File Report 00-397. Available at: <https://pubs.er.usgs.gov/publication/ofr2000397>
12. **Centeno JA,** Cook A, Weinstein P. Environmental Toxicology and Exposure to Natural Dust – The Role of Trace Elements. *Chinese J Geochem* 2006;25(suppl.):222.
13. Selinus O, Finkelman RB, **Centeno JA.** The Medical Geology Revolution. *Chinese J Geochem* 2006;25(suppl.):81.
14. **Centeno JA,** Martinez L, Ladich ER, Page NP, Mullick FG, Ishak KG, Zheng BS, Gibb H, Thompson C, Longfellow D. Arsenic-Induced Lesions: A Histopathology Review. Armed Forces Institute of Pathology, Monograph, 2000. ISBN: 1-881041-68-9.
15. **Centeno JA** (co-author). *Surgical Implants and Other Foreign Materials*, Vol. 74 (1999). International Agency for Research on Cancer, Monograph Series; Lyon, France.
16. Finkelman RB, Zheng BS, **Centeno JA.** Health Impacts of Coal: Facts, Fallacies and Some Solutions. *Geological Society of America* 2001.
17. Chesnick IE, Todorov TI, **Centeno JA,** Newbury DE, Small JA, and Potter K. Manganese-enhanced magnetic resonance microscopy of mineralization. *Proc Int Soc Magn Reso Med* 2005;13:1986.

Major Invited Talks

National Invited Lectures (selected talks)

1. **Invited Seminar Speaker.** “Assessing the Effects of Metals in Human Health: An Overview of Research Projects and Professional Experiences from the Field”. Department of Chemistry, University of Puerto Rico at Mayaguez, Mayaguez, Puerto Rico. January 29, 2021.
2. **Invited Speaker.** “The Interface Between Materials and Biology”. **VII PERSH Workshop.** Institute for Defense Analysis, Nava Research Laboratory, Alexandria, VA. February 7-9, 2017.
3. **Invited Speaker.** “Assessing in vitro metal levels by ICP-MS: Selected Applications in Regulatory Science Research”. XV American Chemical Society National Meeting and Exposition, Washington, DC, August 22, 2017.
4. **Invited Speaker.** “Interrelationship between Soils and Human Health – Trace elements”. National Academy of Sciences Engineering and Medicine 2017. *Soils: The Foundation of Life - Proceedings of a Workshop*, Washington, DC. The National Academies Press, doi:<https://doi.org/10.172276/24866>.
5. **Invited Speaker.** “Extreme Dust Events and Potential Impacts to Human Health”. 2014 American Meteorological Society Washington Forum and American association for the Advancement of Sciences. April 2, 2014. Washington, DC, USA.
6. **Invited Speaker.** “Arsenic – A Beneficial Therapeutic and an Environmental Poison”. Toxicology and Risk Assessment Conference (TRAC2014), April 8-11, 2014. Ohio, USA.
7. **Invited Seminar Speaker.** The Emerging Discipline of Medical Geology. Nicholas School of the Environment, Duke University, April 25-26, 2012.

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8. **Invited Speaker.** “Chemical and Environmental Pathology Studies of Particulate Matter: A Medical Geology Perspective”. Advances on Geospatial Technologies for Health, Santa Fe, New Mexico, 12-13 September 2011.
9. **Speaker.** “Embedded Fragments – A Unique Exposure Situation and Concerns of Possible Health Effects”. 2010 Air Force Medical Research Symposium, Arlington, VA. August 24-26, 2010.
10. **Invited Speaker.** “Health Effects from Embedded Metal Fragments”. VII International Symposium on Recent Advances in Environmental Health Research, Jackson, Mississippi. September 13-15, 2010.
11. **Invited Speaker.** “Chemical Pathology Studies of Particulate Matter – A Medical Geology Perspective”. XXXVIII Navy Occupational Health and Preventive Medicine Conference, Hampton, VA March 26, 2009.
12. **Invited Speaker.** “Health Effects from Exposure to Natural and Mineral Dust”. First Latin-American Conference in Health Disparities – Obesity, Asthma, and Sexuality. San Juan, Puerto Rico. February 28, 2008.
13. **Invited Speaker.** “Integrating Geosciences and Public Health – The role of the Medical Geologists” GeoHealth Conference - Building bridges across the geological and Health Sciences. USGS and Geological Society of America, Reston, VA. March 4-6, 2008.
14. **Invited Speaker.** “Metals, Metalloids and Health”. VII Annual Symposium on the Environment and Hormones, Tulane-Xavier Center for Environmental Research, New Orleans. April 13-16, 2008.
15. **Invited Seminar Speaker.** “Natural History, Toxicology and Health Effects from Chronic Arsenic Exposure”, Department of Toxicology, University of Maryland, School of Medicine, Baltimore, MD. February 1, 2007.
16. **Distinguished Science Research Speaker.** “The Emerging Field of Medical Geology”. Presented at the First Abdul K. Mohamed Distinguished Lecture Series, Jackson State University, Jackson, Mississippi, February 23, 2007.
17. **Invited Speaker.** “Integrating Earth Science Information and Public Health – Examples of Successful Collaborations”. Presented at the Second National Conference on US Geological Survey Health-Related Research – Earth Science and Public Health, Reston, VA. February 27 – March 1, 2007.
18. **Invited Speaker:** “Trace Element Speciation in Environmental Medicine – The Example of Arsenic and Depleted Uranium” 2006 Winter Conference on Plasma Spectrophotometry, Tucson, Arizona. January 9, 2006.
19. **Invited Seminar Speaker;** “Medical Geology – An Emerging Discipline in Support of Environmental and Military Medicine”. Army Corps of Engineers, US Army Engineer Research and Development Center, Vicksburg, Mississippi. April 20, 2006.
20. **Invited Seminar Speaker:** “Metals, Metalloids and Human Diseases – Chronic Arsenic Poisoning as Medical Geology Case Study”. Department of Earth and Environmental Sciences, University of Texas at Arlington. November 9, 2006.
21. **Invited Speaker:** “Confocal Raman Chemical Images of Histological Samples as an Aid to an Understanding of the Pathology of the Disease State.” National Institute of Standards and Technology, Polymers Division of the Materials Science and Engineering Laboratory, Gaithersburg, MD. January 16, 2004.
22. **Invited Speaker:** “Chemical Speciation of Arsenic Metabolites in Tissues”. First International Conference on Biomarkers for Toxicology and Molecular Epidemiology”. Agency for Toxic Substances and Disease Registry, Atlanta, Georgia. May 15-17, 2004.
23. **Invited Paper:** “Depleted Uranium: Embedded Fragments Present Unique Exposure Situations and Concerns of Possible Health Risks”. XXXV International Congress on Military Medicine. Washington, DC. September 15, 2004.
24. **Invited lecture.** “Analytical Determination of Blood Silicon Levels in Patients with Silicone Breast Implants”. VIII International Symposium on Biological and Environmental Reference Materials (BERM-8). National Institute of Standards and Technology, MD. September 17-22, 2000.

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25. **Invited Lecture.** "Metal Ions in Environmental Health and Disease: The Etiology of Endemic Disease Areas". Medical College of Wisconsin, Department of Pathology. November 18, 1999.
26. **Invited Seminar.** "Endemic Arsenosis, Fluorosis and Selenosis in Guizhou Province, China", US Department of Agriculture, Office of International Programs, Washington, D.C. April 18, 1997.
27. **Invited Seminar.** "Prospective Clinical and Laboratory Evaluation of Patients with Silicone Breast Implants: Significance of Baseline Silicone Levels". FDA-Center for Biologics Evaluation and Research, Molecular Immunology Lab. Division of Cellular and Gene Therapies, Bethesda, MD. February 9, 1996.
28. **Invited Colloquium.** "Toxic Elements in Environmental Toxicology: The Chemistry and Speciation of Arsenic, Chromium, and Selenium in the Environment". Department of Civil Engineering, Environmental Engineering Program, University of Maryland, College Park, MD. November 8, 1995.
29. **Invited Seminar.** "Analytical and Spectroscopic Techniques for the Study of Toxic Trace Metals in Environmental Toxicology". National Oceanographic Administration, National Ocean Service, Ocean Seminar Series of the Coastal Monitoring and Bioeffect Assessment Division, Silver Spring, MD. March 29, 1995.
30. **Guest Speaker.** "Analytical Techniques in Environmental Toxicology". Ponce School of Medicine, Department of Pharmacology and Toxicology. September 1, 1994.
31. **Guest Speaker.** "New Applications and Technological Aspects of Research in Environmental Toxicology: Studies on the Chemistry, Speciation, and Remediation of Arsenic, Chromium, and Selenium". Natural Resources Institute, Department of Agriculture, Beltsville, MD. January 11, 1993.
32. **Guest Speaker.** "Novel Methods of Determination and Analysis of Heavy Metals". Appalachian Soil & Water Conservation Research Laboratory, Agricultural Research Service, Beckley, West Virginia. June 17-18, 1993.

International Invited Lectures (selected talks):

1. **Plenary Lecture.** "Inhalation of Particulate Matter – Potential Impacts to Human Health – A Medical Geology Perspective". GeoHealth2020 – The International Meeting of Geohealth Scientists. Bari, Italy; September 1-2, 2020.
2. **Plenary Speaker;** "Atmospheric dust and other particulates: Defining the risk from a chemical, medical geology and environmental pathology perspective". 2nd International Workshop on Medical Geology, Autonomous University of Chihuahua, Chihuahua, Mexico; October 22-24, 2020.
3. **Keynote Speaker;** "Arsenic: A Beneficial Therapeutic and an Environmental Poison". 2nd International Workshop on Medical Geology, Autonomous University of Chihuahua, Chihuahua, Mexico; October 22-24, 2020.
4. **Invited Speaker.** "Medical Geology – An Emerging Discipline Integrating Public Health, Earth Sciences, and Medicine - *An Overview of Its Origins, Applications and Future*". Specialized Career in Mining Geology, Department of Geological Sciences, Faculty of Natural and Exact Sciences, University of Buenos Aires, Argentina. October 19, 2020.
5. **Plenary Speaker;** "Human Health in the Context of Climate Change: A Medical Geology Perspective". 7th Theoretical-Practical International Workshop for the Handling of Victims of Hazmat and Bioterrorism – Sustainable Chemistry : VOCs Emissions, Impact in CO₂, and Climate Change. November 17-20, 2020; Santiago, Chile.
6. **Panel Speaker;** "Understanding the Human Health Risk Factors and Exposure to Mineral Dust". Panel Speaker; 7th Theoretical-Practical International Workshop for the Handling of Victims of Hazmat and Bioterrorism – Sustainable Chemistry: VOCs Emissions, Impact in CO₂, and Climate Change. November 17-20, 2020; Santiago, Chile.
7. **Keynote Speaker.** "Medical Geology: Impacts of the Natural Environment on Public Health". 2nd International Industrial and Environmental Toxicology Congress". Chamber of Geological Engineers, Istanbul, Turkey; November 18, 2020.

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8. **Plenary Speaker.** “Inhalation of Particulate Matter and Potential Impacts to Human Health”. VIII International Conference on Medical Geology – MEDGEO2020. August 12-15, 2019, Guiyang, China.
9. **Keynote Speaker.** “A medical geology perspective on arsenic as a poison and medicinal agent”. First International Conference on Metal Detoxification”, Berlin, Germany, June 10-15, 2019.
www.metdetox.org.
10. **Invited session talk.** “Modernizing Biocompatibility for the Study of Materials Used in Medical Devices”. First International Conference on Metal Detoxification. June 10-15, 2019. Berlin, Germany.
www.metdetox.org.
11. **Invited Keynote Speaker.** Lecture Series at: University of Salamanca, Faculty of Science and Medicine, Spain (11/16/2017); University Hospital of Samalanca (11/18/2017); Geological Survey of Spain in Madrid (11/17/2017), and University of Granada, Faculty of Pharmacy, Granada, Spain (11/20/2017).
12. **Invited Speaker.** “Toxicology: An evolving discipline”. National Polytechnical University, Department of Environmental and Civil Engineering, Quito, Ecuador. October 22, 2015.
13. **Invited Speaker.** “Impacts of the Natural Environment on Human Health – The Emerging Field of Medical Geology”. First International Symposium on Medical Geology in Africa. University of Johannesburg, South Africa. March 26, 2014.
14. **Invited Seminar.** “Atmospheric Dust and Other Particulates – Defining the Risks from a medical Geology Perspective”. National Cheng Kung University, Medical College, Tainan, Taiwan, May 28, 2012.
15. **Invited Seminar.** “Arsenic – A Beneficial Therapeutic and Environmental Poison”. Academia Sinica, Taipei, Taiwan, May 30, 2012.
16. **Invited Plenary Speaker.** “Health and Earth – The Emerging Discipline of Medical Geology”. IX International Symposium on Environmental Geochemistry, University of Aveiro, Portugal, July 15-22, 2012.
17. **Invited Speaker and Session Chair.** SESEH 2012 Sino-European Symposium on Environment and Health.; National University of Ireland, Galway, Ireland. August 20-25, 2012.
18. **Invited Speaker.** “Arsenic – A Beneficial Therapeutic and an Environmental Poison”. XXIX Congress of the International Academy of Pathology, Cape Town, SA; September 3-0 – October 5, 2012.
19. **Invited Plenary Speaker.** “Health and Earth – Medical Geology: Building a Safer Environment”. XXIII Colloquium on African Geology, University of Johannesburg, South Africa. January 8-14, 2011.
20. **Invited Speaker.** “Atmospheric dust and other particulates: Defining the risk from a medical geology perspective”. IV International Conference on Medical Geology, Bari, Italy, September 20-25, 2011.
21. **Invited Speaker.** “Environmental pathology and health effects from arsenic poisoning: A systematic overview”. Third International Congress on Arsenic in the Environment – Arsenic in geosphere and human disease. National Cheng Kung University (NCKU), Tainan, Taiwan. May 17-21, 2010.
22. **Invited Speaker.** “Global impacts of geogenic arsenic”. SEGHS 2010 International Conference of the Society of Environmental Geochemistry and Health, National University of Ireland, Galway, Ireland. June 27-July 2, 2010.
23. **Invited Speaker.** “Atmospheric dust and other particulates – Defining the risks from an environmental health perspective. SEGHS 2010 International Conference of the Society of Environmental Geochemistry and Health, National University of Ireland, Galway, Ireland. June 27-July 2, 2010.
24. **Invited Speaker.** “Medical Geology – An Emerging Discipline”. First Portuguese Workshop on Medical Geology. Instituto Superior Tecnico, Lisboa, Portugal. July 5-10, 2010.
25. **Invited Speaker.** “Medical Geology – An Emerging Discipline”. International Workshop on Medical Geology. Ankara University and Medical School, Ankara, Turkey. July 10-12, 2010.
26. **Invited Speaker.** “Metal-Induced Skin Lesions – Arsenic as an Environmental Case Study”. XXVIII International Congress of the International Academy of Pathology and World Congress of Academic and Environmental Pathology, Sao Paulo, Brazil. October 10-15, 2010.

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27. **Invited Speaker.** “Medical Geology – An Emerging Field in Public Health”. XXVIII International Congress of the International Academy of Pathology, Sao Paulo, Brazil. October 10-15, 2010.
28. **Invited Speaker.** “Environmental Pathology, Public Health, and Medical Geology”. Invited lectures presented at Universities and Medical Schools in four Bolivian cities including Sucre, Potosi, Oruro and La Paz. Sponsored by the Bolivian Academy of Medicine, USAID-Bolivia, and Socios Para el Desarrollo-ProSalud, Bolivia. April 4-9, 2009.
29. **Invited Speaker** (4 lectures). Workshop on Environmental Pathology, Toxicology and Medical Geology. Argentine Division of the International Academy of Pathology, Buenos Aires, Argentina, October 09, 2009.
30. **Invited Speaker** (4 lectures). “Medical Geology Workshop and Short Course”. Geological Survey of Cyprus and Cyprus Association of Geologists and Mining Engineers. February 12, 2008, Nicosia, Cyprus.
31. **Keynote Speaker.** “Short Course on Environmental Pathology and Medical Geology”, La Paz, Bolivia. July 17-18, 2008.
32. **Invited Speaker.** “Arsenic and Medical Geology – The Role of the Earth Scientist in the Assessment and Prevention of Health Risk”. XXXIII International Geological Congress, Oslo, Norway, August 6-12, 2008.
33. **Invited Speaker.** “Dust and Human Health – Environmental Toxicology Aspects from Exposure to Nanoparticles”. XXVII International Congress of the International Academy of Pathology, Athens, Greece. October 12-17, 2008.
34. **Invited Speaker,** Universidad de la Republica de Uruguay, Faculty of Chemistry, Montevideo, Uruguay. Conference on Environmental Toxicology and Medical Geology. May 7-8, 2007.
35. **Plenary Speaker.** “Health Effects from Exposure to Geogenic Dust”. XVIII Mining Convention, Arequipa, Peru. September 10-14, 2007.
36. **Invited Speaker,** “A Successful Model for the Integration of Earth Sciences and Public Health”, International Symposium on Geosciences for Environmental Management, Atibaia, Brazil. October 22, 2007.
37. **Invited Plenary Speaker:** “Potential Health Risks from Long-Term Mercury Exposure – A Medical Geology Opportunity”. IX International Symposium on Metal Ions in Biology and Medicine, University of Coimbra, Lisbon, Portugal, May 21-24, 2006.
38. **Keynote Speaker.** “Global Impacts of Geogenic Arsenic – A Medical Geology Research Case”. Royal Swedish Academy of Sciences, Stockholm, Sweden. May 2006.
39. **Keynote Speaker:** “Medical Geology – An Emerging Discipline in Support of Environmental Medicine and Public Health”. XVIII Brazilian Congress on Geology, Aracaju, Brazil, September 3-8, 2006.
40. **Invited Speaker:** “Health Effects of Natural and Mineral Dust – The Role of Trace Elements and Compounds”. XXVI Congress of the International Academy of Pathology – Symposium on Environmental Pathology – Respiratory Toxicology. Montreal, Canada. September 16-21, 2006.
41. **Invited Speaker:** “Environmental Toxicology and Exposure to Natural Dust – The Role of Trace Elements”. The VII International Symposium on Environmental Geochemistry, Beijing, China. September 24-27, 2006.
42. **Invited Speaker:** “Medical Geology – An Emerging Discipline in Environmental Medicine”. British Geological Survey, Nottingham, UK. October 31, 2006.
43. **Invited Plenary Speaker:** “Medical Geology – Impacts of the Natural Environment on Human Health”. VIII Congresso de Geoquímica dos Países de Língua Portuguesa, University of Aveiro, Portugal. July 11-16, 2005.
44. **Keynote Speaker:** “Environmental Health and the Role of Trace Elements on the Development of Human Diseases”. First US-Taiwan Symposium on Micronutrients, Trace Elements, and Human Health, Taipei, Taiwan. February 28, 2004.
45. **Invited Speaker:** “Clinical and Toxicological Aspects of Mercury Poisoning”. Department of Internal Medicine, National Taiwan University Hospital, Taipei, Taiwan. February 27, 2004.
46. **Invited Speaker:** “Environmental Pathology and Health Effects of Chronic Arsenic Poisoning”. Department of Pathology, Wellington School of Medicine, Wellington, New Zealand. March 03, 2004.
47. **Invited Speaker:** “Environmental Health and Toxicology of Trace Elements”. Environmental Science Research

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- Center, Wellington, New Zealand. March 04, 2004.
48. **Invited Speaker:** “Environmental Medicine and the Emerging Discipline of Medical Geology”. School of Public Health Sciences, Wellington School of Medicine, Wellington, New Zealand. March 05, 2004.
 49. **Invited Speaker.** “Advances on Medical Geology: Chronic Arsenic Exposure”. Karolinska Institute, Stockholm, Sweden. May 13, 2004.
 50. **Plenary Speaker.** “Environmental Pathology of Exposures to Toxic Metals”. VIII International Symposium on Metal Ions in Biology and Medicine, Hungarian Academy of Sciences, Budapest, Hungary, May 21, 2004.
 51. **Invited Speaker:** “In Vivo and In Vitro Studies on Arsenic and Arsenic Compounds”. European Center for Methods Validation in Toxicology. Ispra, Italy. August 30-31, 2004.
 52. **Invited Speaker:** “Medical Geology: Impacts of the Natural Environment in Public Health”. XXV Congress of the International Academy of Pathology, Brisbane, Australia. October 10-15, 2004.
 53. **Invited Speaker.** “Exposure to toxic metals and impacts to human health”. Xian Medical University, Xian, Shaanxi, P.R. China. July 2002.
 54. **Plenary Speaker.** “Emerging topics on trace element speciation – depleted uranium and arsenic as case studies”. *International Conference on Trace Element Speciation in Biomedical, Nutritional and Environmental Sciences*. Sponsored by GSF-National Research Center for Environment and Health Institute for Ecological Chemistry, Munich, Germany (May 2001, 2004, 2008).
 55. **Invited Speaker.** “Sample preparation and analytical techniques in forensic toxicology”. ICITAP-U.S. Department of Justice and US Embassy, Guatemala (1999).
 56. **Invited Speaker.** “Emerging Topics in Environmental Pathology: Medical Geology and the Role of Trace Elements on the Development of Human Diseases.” Institute Nazionale Superiore di Sanita, Ministero di Sanita, Rome, Italy. May 15, 2001.
 57. **Invited Speaker.** “Metals, Health and the Environment.” University of Zambia, Lusaka, Zambia. June 26-29, 2001.
 58. **Invited Speaker.** “Environmental Toxicology, Pathology and Analysis of Trace Elements.” University of Witwatersrand, Johannesburg, South Africa. Symposium on Coal Minerals, Trace Elements and Their Impact on Environment and Health. July 3-4, 2001
 59. **Invited Speaker.** “Environmental Toxicology, Pathology and Analysis of Trace Elements.” Venezuelan Geological and Mining Survey (INGEOMIN), Caracas, Venezuela. July 25-27, 2001.
 60. **Invited Speaker:** “Environmental Toxicology and Health Effects of Trace Elements.” Argentine Geological and Mining Survey (SEGEMAR), Buenos Aires, Argentina. September 10-14, 2001.
 61. **Invited Speaker.** “Environmental Toxicology and Pathology: An Overview of Analytical Methods on Trace Element Research.” Canterbury Health Laboratories, Christchurch, New Zealand. November 27, 2001.
 62. **Invited Speaker.** “Environmental Toxicology and Pathology: Exposure to Toxic Trace Elements.” University of Otago, Wellington School of Medicine and Ecology Health Center, Wellington, New Zealand. December 4, 2001.
 63. **Invited lecture.** “Environmental Toxicology and Pathology of Metal Ion Exposures- Skin, Kidney, and Liver”. In *Biochemistry and Health – Workshop on Medical Geology*. Uppsala, Sweden. September 4-9, 2000.
 64. **Invited lecture.** “The International Tissue and Tumor Registry for Chronic Arsenosis: A Source for Environmental Pathology Studies”. XXIII International Congress of the International Academy of Pathology and 14th World Congress of Academic and Environmental Pathology. Nagoya, Japan. October 15-20, 2000.
 65. **Invited Speaker.** “Environmental Geochemistry and the Role of Trace Elements and Toxic Metal Ions on the Development of Human Diseases”, Institute of Endemic Bone Diseases, Xi’an Medical Univ., Shaanxi, P.R.C, August 23, 1999.
 66. **Invited Speaker.** “Environmental Pathology and Health Effects of Arsenic Poisoning: An Introduction and Overview”, National Hydatid Disease Center and Xinjiang Institute for Endemic Disease Control and Research, Urumqi, P.R. China. August 26, 1999.

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67. **Invited Speaker.** “Trace Elements and Toxic Metal Ions in Environmental Health and Pathology”. Trace Element Research Lab. at the First Military Medical Hospital, Beijing, PRC. August 31, 1999.
68. **Invited Speaker.** “Environmental Geochemistry and the Role of Trace Elements and Toxic Metal Ions on the Development of Human Diseases” *Workshop on Environmentally Toxic Substances: New Advances and Perspectives*; Cuernavaca, Mexico, October 1, 1999.
69. **Invited seminar.** “Advances on the analysis of trace toxic metals and foreign materials in environmental toxicology and pathology”. Academy of Sciences of China and Institute of Geochemistry, Guiyang, Guizhou Province, PRC. November 13, 1996.

Proffered Communications (oral or poster presentations)

1. **Centeno JA**, Fiore S. Health Impacts of Natural Dust: Defining the Risk from a Chemical, Medical Geology and Environmental Pathology Perspective. First International Conference on Atmospheric Dust (DUST2014), Bari, Italy. June 2-6, 2014.
2. Hines SE, Guer P, Klingerman S, Breyer R, **Centeno JA**, Gaitens J, Oliver M, Squibb K, McDiarmid M. Chest imaging abnormalities in Gulf War I Veterans 20 years after exposure to depleted uranium inhalation and shrapnel injury. Annual Meeting of Thoracic Society, 2013.
3. Gray PJ, **Centeno JA**. Determination of 235U/238U and 236U/238U isotope ratios in human urine by inductively coupled plasma mass spectrometry. Presented as a poster at 2012 Winter Plasma Conference. January 2012.
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5. Foster ML, Taylor KH, Stockelman M, **Centeno JA**, Dorman DC. Preliminary assessment of pulmonary toxicity of Middle Eastern sand extract in a rat model. 50-th Annual Meeting Society of Toxicology, Washington, DC. March 6-9, 2011.
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