Dr. Elise CHAMPEIL

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Professional experience

Full professor of Organic Chemistry, John Jay College of Criminal Justice. (August 2019)

Associate professor of Organic Chemistry, John Jay College of Criminal Justice. (2011-2019)

Chemistry faculty member. City University of New York Graduate Center. (2008-Present)

Assistant professor of Organic Chemistry, John Jay College of Criminal Justice. (2006-2011)

Post-doctoral research associate. (2003-2006)

Education

Ph.D Trinity College, University of Dublin, Ireland. (2000)

Masters of Chemical Engineering, Ecole Nationale Supérieure de Chimie de Lille, France. (1996)

Key responsibilities

Course coordinator:

- SCI 166 Chemistry of Cooking (2013-curent).
- CHE 201 Organic Chemistry I (2006-2013).

Undergraduate level teaching (throughout the period 2006-current)**:**

- Organic Chemistry I and II (CHE 201& CHE 202). Lecture, recitation, laboratory (Created content).
- Undergraduate Research Internship (FOS 402).
- CHE 201 Hybrid On-line Organic Chemistry I (Created course and content).
- SCI 166 Chemistry of Cooking. (General education course for non-science majors. Created course and content).
- Implemented a peer-led team learning session in Organic chemistry recitation.

Graduate level teaching (2011-2012):

- FOS 717 Identification of Organic Compounds. Forensic Science Master's program. (Created content).

Course technological improvement:

- Implemented "clickers" technology and "on-line" homework in CHE 201 and CHE 202.

Mentoring:

- I am currently mentoring 2 Master's students within the Forensic Science program and 1 PHD student at the graduate center.

Past theses supervised (8 throughout the period 2009-2020):

1- Discrimination of Soil Organic Matter Using Nuclear Magnetic Resonance in conjunction with principal component analysis. (2020)

2-Quantitation of cocaine in coca plants by HPLC and GC-MS. Comparison of both analytical methods. (2017)

3-Quantitation of amoxicillin in urine by Nuclear Magnetic Resonance. (2015)

4-Quantitation of wine components by NMR spectroscopy. (2014)
*5-Quantitation of local anesthetic levels following a peripheral nerve bloc*k. (2013)
6-Synthesis of fluoride anions detectors. (2012)
7-Identification of gamma-hydroxybutyric acid and gamma-butyrolactone in beverages using NMR and the PURGE solvent suppression technique. (2012)
8-Detection of ecstasy in human urine by NMR spectroscopy. (2009)

- Undergraduate students mentoring
  37 students have joined my laboratory for undergraduate research since I joined John Jay College. 11 students have been accepted in a post-graduate program.
  I was a participating faculty mentor in the NSF/CSI program in 2009 and I am currently a participating faculty mentor in the Program for Research Initiatives in Science and Math (PRISM) and in the Macaulay Honors Program.
- I also mentor high school students through the Science and Technology Entry Program (S. T. E. P.).

Other primary responsibilities:

Department service:

- Member of the "personnel and budget" committee (2016-2018)
- Member of PRISM advisory board (2017-current)
- Students advisement (part of the pilot program) (2012-current)
- Forensic Science Master's program admission committee (2012-2013)
- Grades of appeal committee (2011-2012)
- Faculty search committees (HEO, CLT, Inorganic chemistry line) (2009,12,16)
- Science department orientation for incoming students (2008-2009)
- Undergraduate major/minor fair representative (2007-2009)

College service:

- Member of the " faculty personnel" committee (2017-current)
- Panelist: Interdisciplinary study review, CUNY research awards (2014-2015)
- Working group to develop new general education learning rubrics (2013)
- Provost taskforce: Curriculum development: Liberal arts honors program (2009-2010)
- Departmental or "at large" college council representative. (2007-2012)
- Faculty senate member. (2007-2012)
- College planning committee (2007-2008)
- College open house day participant (2006-2007)

University service:

- Chair of the PSC-CUNY Research Awards Chemistry panel (2019-2022)
- Member of the graduate center, City University of New York (2008-Current)

Service includes: 1) preparing, supervising and grading exams for the organic chemistry sub-section; 2) participation in thesis committees (participation in 1 doctoral committee); participation in the dissertation fellowship award committee

Service to the profession:

- *Reviewer for the following journals (among others)*
  "Journal of Forensic Sciences" (AAFS)
  "Bioorganic Chemistry" (Elsevier)
  "Biochemistry" (ACS)
  "ChembioChem" (Wiley)
  "Food Chemistry" (Elsevier)
  "Bioorganic and Medicinal Chemistry" (Elsevier)
  "Chemical Research in Toxicology" (ACS)
- Pro-Bono consultant for "Mobius Therapeutics"

Professional Memberships

- American Chemical Society.
- American Association for Cancer Research.
- American Academy of Forensic Sciences.

Research and Educational Grants Funded

- NIH/SC3 grant # 41876 ($496,000 Champeil, PI) (2019-2023)

"Role of p21 in the toxicity of MC and DMC DNA Interstrand Crosslink"

- NIH/SC3 grant # 41875 ($464,000 Champeil, PI) (2014-2018)
  "Role of p21 in the upstream p53-independent signaling pathway in response to MC and DMC DNA interstrand crosslinks"

- PSC-CUNY awards (total amount : $ 23,575):
  1) "Synthesis of nucleoside adducts of mitomycin C"
  Champeil (PI) $ 4,518 (2007-2008)
  2) "Novel merocyanines for the detection of chemical warfare agents" (2008-2009)
  Champeil (PI) $ 3,200
  3) "^{1}H NMR analysis of MDMA and its metabolites in urine" (2009-2010)
  Champeil (PI) $ 2,867.5
  4) "Synthesis of fullerenyl derivatives" (2010-2011)
  Champeil (PI) $ 2,490
  5) "Synthesis of nucleotide adducts of mitomycin C"
  Champeil (PI) $ 3,500 (2011-2012)
  6) "Discrimination of soil organic Matter *via* NMR spectroscopy" (2013-2014)
  Champeil (PI) $ 3,500
  7) "Crosslinking of DNA by decarbamoylmitomycin C" (2018-2019)
  Champeil (PI) $ 3,500

- Seed funding "Biological effects of DNA crosslinks by decarbamoylmitomycin C"
  Champeil (PI) $ 2,000 (2018)

- John Jay College student technology award "Clickers technology applied to organic chemistry courses"
  Champeil, Proni (PIs) $ 2,000 (2008)

- PRISM (Program for Research Initiatives in Science and Math) equipment grants:
  1) "Detection of ropivacaine and aryl amines in water matrices"
  Champeil (PI), Korobkova (PI) $ 14,018 (2011)
  2) "MC and DMC-adducts structures and the role of p21 in the toxicity of the α-ICL and β-ICL"
  Champeil (PI), Cheng (co-PI) $ 39,000 (2015)
  3) "Elucidation of toxic mechanisms by flow cytometry"
  Champeil (co-PI), Cheng (PI) $ 75,000 (2018)

Professional Recognition and Awards

- *John Jay College*
  1-John Jay College senior scholar award (2018)
  2-John Jay College merit increase recipient (2015)
  3-John Jay College mid-career award (2013)
- *City University of New York*
  1-Summer Advanced Grant writing Award (SAGA) ($ 5,000). (2017)
  "Correlation of MC and DMC-adducts structures with the role of p21 in the toxicity of the α-ICL and β-ICL". Only faculty member from John Jay College selected for this award in 2017.
  2-Recognition: "Salute to Scholar" (2014-18)
  3-Recognition: Featured in CUNY Research Foundation 2017 annual report for my NIH research award: "Role of p21 signaling pathway in response to MC & DMC DNA interstrand crosslinks". Only faculty member from John Jay College selected in 2017. (2017)
  4-Selected to be part of the Mid-Career Faculty Fellowship program (2019)

- *National*
  AACR MSI faculty scholar in cancer research award ($ 1500) (2015)

- *French*
  Habilitation à diriger des recherches (HDR), Montpellier, France. (2018)

Publications

(Total number of peer reviewed journal publications: 27, conference proceedings: 30, book chapter: 1)

Peer reviewed journals (27 papers and 1 invited review. 24 publications are affiliated with John Jay College)

Journals Impact Factors (IF) are from the Journal Citation Reports (JCR). Citations are from Google Scholar (GS).
Δ: indicates a John Jay undergraduate student. Highlighted in yellow.
‖: Indicates a student in the Master of Forensic Sciences. Highlighted in grey.
***: indicates the corresponding author(s) i.e. the senior author(s).**

1- Aguilar, W.[Δ], Zacarias, O. [Δ], Romaine, M.[Δ], Proni, G., Petrovic, A. G., Abzalimov, R., Paz, M. M. & **Champeil, E.* (**2020). Synthesis of Oligonucleotides containing the *cis*-Interstrand Crosslink Produced by Mitomycins in their Reaction with DNA. *Chemistry a European Journal,* accepted. Impact Factor: 5.16. **Paper selected as VIP (very important paper) and selected for an inside cover.**

2-Zheng, M. [Δ], Hwang, S. [Δ], Snyder, T [Δ], Aquilina, J. [Δ], Proni. G. , Paz, M. M., Pradhan, P., Cheng, S.Y., & **Champeil, E.*** (2019). Synthesis of Mitomycin C and Decarbamoylmitomycin C N^2 deoxyguanosine-adducts. *Bioorganic Chemistry, 92, 2019.* 103280-103290*.* Impact factor: 3.926 https://doi.org/10.1016/j.bioorg.2019.103280

3-Aguilar, W.[Δ], Paz, M. M., Vargas, A.[Δ], Zheng, M. [Δ], Cheng, S.Y., & **Champeil, E.*** (2018). Interdependent sequence-selectivity and diastereoselectivity in the alkylation of DNA by decarbamoylmitomycin C. *Chemistry a European Journal, 24 (50)*, 13278-13289. Impact Factor: 5.16. 1 citation.

4-Zacarias, O. [Δ], Aguilar, W. [Δ], Paz, M. M., Tsukanov, S. [Δ], Zheng, M. [Δ], Cheng, S.Y., Pradhan, P., & **Champeil, E.*** (2018). Isolation and rationale for the formation of isomeric decarbamoylmitomycin C-N^6-deoxyadenosine adducts in DNA. *Chemical Research in Toxicology, 31 (8),* 762-771. Impact Factor: 3.432.

5-Cheng, S. Y.*, Vargas, A.[Δ], Lee, J. -Y. [Δ], Clement, C. C.*, & **Champeil, E.*** (2018). Involvement of Akt in mitomycin C and its analog triggered cytotoxicity in MCF-7 and K562 cancer cells. *Chemical Biology and Drug Design*, *92* (6), 2022-2034. Impact Factor: 2.328.

6-Aguilar, W.[Δ], Paz, M. M**.,** Vargas, A.[Δ], Clement, C. C., Cheng, S.Y., & **Champeil, E.*** (2018). Sequence-dependent diastereospecific and diastereodivergent crosslinking of DNA by decarbamoylmitomycin C" *Chemistry a European Journal*, *24* (23), 6030-6035. Impact factor: 5.16. 2 citations.

7-Napolitano, T. [Δ], Cheng, S.Y., Nielsen, B. [Δ], Choi, C. [Δ], Aguilar, W. [Δ], Paz, M.M., Sapse, A.M., & **Champeil, E**.* (2017). Acetone promoted 1,4-migration of an alkoxycarbonyl group on a syn-1,2-diamine. *Tetrahedron Letters*, *58* (7), 597-601. Impact factor: 2.377.

8-Cheng, S. Y.*, Seo, J.[Δ], Huang, B.T.[Δ], Napolitano, T.[Δ], & **Champeil, E**.* (2016). Mitomycin C and decarbamoyl mitomycin C induce p53-independent $p21^{WAF1/CIP1}$ activation. *International Journal of Oncology*, *49* (5), 1815-1824. Impact factor: 3.333. 6 citations.

9-Bose, A., Surugihalli, C., Pande, P., **Champeil, E**., & Basu A. K.* (2016). Comparative error-free and error-prone translesion synthesis of the N^2 -2'-deoxyguanosine adducts formed by mitomycin C and its metabolite, 2,7-diaminomitosene, in human cells. *Chemical Research in Toxicology*, *29* (5)*,* 933-939. Impact factor: 3.432. 6 citations.

10-**Champeil, E.***, Cheng, S. Y.*, Huang, B.T.[Δ], Conchero-Guisan, M., Martinez, T. [Δ], Paz, M.M., & Sapse, A.M. (2016). Synthesis of Mitomycin C and Decarbamoylmitomycin C N^2 deoxyguanosine-adducts. *Bioorganic Chemistry, 65*, 90-99. Impact factor: 3.929. 4 citations.

11-Mouzi, L., Adams, O.[‖], Cuff, G., Lukasiewicz, E.[Δ], **Champeil, E**., & Atchabahian, A.* (2016). Plasma concentrations of ropivacaine following ultrasound-guided or nerve-stimulator-guided femoral nerve block: A prospective randomized study. *Anaesthesia Critical Care and Pain Medicine*, *35* (1), 45-48. Impact factor: 2.200. 1 citation.

12-**Champeil, E**.*, & Sapse, A.M (2014). Synthesis of a mitomycin C-lexitropsin hybrid. *Comptes Rendus Chimie, 17* (12), 1190-1196. Impact factor: 1.877. 2 citations.

13-**Champeil, E**.*, Paz, M. M., Lukasiewicz, E.[Δ], Kong, W.[Δ], Watson, S.[Δ], & Sapse, A.M. (2012). Synthesis of a major mitomycin C DNA adduct *via* a triaminomitosene. *Bioorganic and Medicinal Chemistry Letters, 22* (23), 7198-7200. Impact factor: 2.442. 3 citations.

14-Lesar, C.T. [‖], Decatur, J., Luckasiewicz, E.[Δ], & **Champeil, E**.* (2011). Identification of gamma-hydroxybutyric acid (GHB) and gamma-butyrolactone (GBL) in beverages using NMR and the PURGE solvent-suppression technique. *Forensic Science International*, *212* (1-3), 40-45. Impact factor: 1.974. 16 citations.

15-Sapse, D., **Champeil, E**.*, & Sapse, A.M. (2011). Theoretical calculations applied to the study of the energetics of reactions of methamphetamine synthesis. *Comptes Rendus Chimie*, *14* (5), 503-510. Impact factor: 1.877. 2 citations.

16-Invited review: Bargonetti, J., **Champeil, E**., & Tomasz, M.***** (2010). Differential toxicity of DNA adducts of mitomycin C. *Journal of Nucleic Acids,* available on line. DOI:10.4061/2010/698960. 33 citations.

17-Weng, M.-W., Zheng, Y., Jasti, V.P., **Champeil, E**., Tomasz, M., Wang, Y., Basu, A. K., & Tang, M.-S* (2010). Repair of mitomycin C mono- and interstrand cross-linked DNA adducts by UvrABC: a new model. *Nucleic Acid Research, 38* (20)*,* 6976-6984. Impact factor: 11.561. 40 citations.

18-Liu, J.[‖], Proni, G., & **Champeil, E**.* (2010) Identification and quantitation of 3,4-methylenedioxy-*N*-methylamphetamine (MDMA, ecstasy) in human urine by ^{1}H NMR spectroscopy. Application to five cases of intoxication. *Forensic Science International, 194* (1-3), 103-107. Impact factor: 1.974. 17 citations.

19-**Champeil, E**.*, Proni,G., & Sapse, D. S. (2009) Ab Initio studies of receptor interactions with AMPA ((*S*)-2-amino-3-(3-hydroxy-5-methyl-4-isoxazolyl) propionic acid) and kainic acid (2*S*-(2α, 3β, 4β))-2-carboxy-9-(1-methylethenyl)-3-pyrrolidineacetic acid. *Journal of Molecular Modeling, 15* (9), 1109-1117. Impact factor: 1.507. 1 citation.

20-Paz, M. M., Ladwa, S., **Champeil, E**., Tang, L.-Q., Rockwell, S., Boamah, E., Bargonetti-Chavarria, J., Callahan, J., Roach, J., & Tomasz, M.* (2008) Mapping DNA adducts of mitomycin C and decarbamoyl mitomycin C in cell lines using liquid chromatography/ electrospray tandem mass spectrometry. *Chemical Research in Toxicology, 21* (12)*,* 2370-2378. Impact factor: 3.432. 23 citations.

21-Sapse, D. S., **Champeil, E**., Maddaluno, J., Fressigné, C., & Sapse, A. M.* (2008) Ab initio study of the interaction of DNA fragments with methyllithium. *Comptes Rendus Chimie, 11* (10), 1262-1270. Impact factor: 1.877. 5 citations.

22-**Champeil, E**.*, Paz, M. M., Ladwa, S., Clement, C., Zatorski, A., & Tomasz, M.* (2008) Synthesis of an oligodeoxyribonucleotide adduct of Mitomycin C by the postoligomerization method *via* a triamino mitosene. *Journal of the American Chemical Society, 130* (29)*,* 9556-9565*.* Impact factor: 14.357. 14 citations.

23-**Champeil, E**., Crean, C., Larraya, C., Pesticelli, G., Proni, G., & Ghosez, L.* (2008) Functionalization of C60 via organometallic reagents. *Tetrahedron, 64* (45), 10319-10330. Impact factor: 2.377. 26 citations.

24-**Champeil, E**., Pradham, P., & Lakshman, M. K.* (2007) Palladium-catalyzed synthesis of nucleoside adducts from bay and fjord region diol epoxides. *Journal of Organic Chemistry, 72* (14), 5035-5045. Impact factor: 4.805. 15 citations.

25-**Champeil, E**., & Draper, S. M.* (2001) Ferrocenylalkynes as ligands in transition metal complexes. *Journal of the Chemical Society*, *Dalton Transactions, 9*, 1440-1447. Impact factor: 4.099. 19 citations.

26-Draper, S. M.*, Delamesiere, M., **Champeil, E**., Twamley, B., Byrne, J. J., & Long, C. (1999) Novel acetylene-linked di-cobalt and tetra-cobalt carbonyl clusters" *Journal of Organometallic Chemistry*, *589* (2), 157-167. Impact factor: 1.946. 31 citations.

27-Braga, D., Draper, S. M., **Champeil, E.**, & Grepioni, F.* (1999) Inorganic-organometallic crystal synthesis. The role of charge-assisted C-H…O and C-H…Cl hydrogen bonds in crystalline $[(C_5H_5)_2Co][H_2PO_4].3H_2O$ and $[(C_6H_5Me)_2Cr][Cl]$. *Journal of Organometallic Chemistry, 573* (1-2), 73-77. Impact factor: 1.946. 44 citations.

28-O'Callaghan, C. N., McMurry, T. B. H.*, Draper, S. M., & **Champeil, E.** (1999) Nitrile and non-nitrile pyridine products from the reaction of 2-cyano-3-(X-nitrophenyl)prop-2-enamides with methyl 3-oxobutanoate. *Journal of chemical research (S)*, *12*, 690-691. Impact factor: 0.646.

Book Chapter

Champeil, E. (2012). Magnetic resonance spectroscopy: a powerful tool for the identification and quantitation of drugs and drugs of abuse in biofluids. In D. Sapse & L. Kobilinsky (Eds), *Forensic Science Advances and Their Application in the Judiciary System* (pp.113-131). Boca Raton, FL: CRC press, Taylor and Francis group.

Papers Presented/Proceedings from Conferences (32):

All papers presented below have gone through a review process:

1- Clement, C., Cheng, S.-Y., Dzieciatkowska, M., Aguilar, W.$^{\Delta}$, & **Champeil E.** (2020, June). *Label free pharmacoproteomic assays enabled the discovery of cellular pathways involved in the survival of MCF7 and K567 cancer cells*. Paper presented at the 68th national meeting of the American Society for Mass Spectrometry, Houston, TX, (USA), in the proceedings of the American Society for Mass Spectrometry, abstract ID number 302991. ASMS.

2-Clement, C., Cheng, S.-Y., Dzieciatkowska, M., Aguilar, W.$^{\Delta}$, & **Champeil E.** (2018, June). *Label free proteomics profiling of MCF7 and K562 cancer cells treated with mitomycin C and decarbamoyl mitomycin C*. Paper presented at the 66th national meeting of the American Society for Mass Spectrometry, San Diego, CA, (USA), in the proceedings of the American Society for Mass Spectrometry, abstract ID number 295603. ASMS.

3-Vargas, A. $^{\Delta}$, Lee, J.-Y. $^{\Delta}$, **Champeil, E.**, & Cheng, S-Y. (2018, March). *AKT involvement in p21 activation Induced by Mitomycin C and its analog*. Paper presented at the 57th national meeting of the Society Of Toxicology, San Antonio, TX, (USA), in the proceedings of the Society of Toxicology annual meeting abstract supplement, abstract ID number 2474. SOT.

4-Clement, C., Cheng, S.-Y., Dzieciatkowska, M., Aguilar, W.$^{\Delta}$, & **Champeil, E.** (2017, December). *Label free proteomics profiling of MCF7 and K562 cancer cells treated with mitomycin C and decarbamoyl mitomycin C identifies main cellular networks leading to inhibition of tumor cell proliferation*. Paper presented at the annual meeting of the American Society for Cell Biology and European Molecular Biology Organization, Philadelphia, PA, (USA), in the proceedings of the American Society for Cell Biology and European Molecular Biology Organization (pp. 18), abstract ID number P1310-B317. ASCB/EMBO.

5-Aguillar, W.$^{\Delta}$, & **Champeil, E.** (2017, August). *Regioselectivity of decarbamoylmitomycin C DNA monoalkylation*. Paper presented at the 254th national meeting of the American Chemical Society, Washington, DC, (USA), in the proceedings of the American Chemical Society, abstract ID number MEDI-194. ACS.

6-Zacarias, O.$^{\Delta}$, & **Champeil, E.** (2017, August). *Novel DNA adducts formed by decarbamoylmitomycin C at N^6 of deoxyadenosine*. Paper presented at the 254th national meeting of the American Chemical Society, Washington, DC, (USA), in the proceedings of the American Chemical Society, abstract ID number MEDI-311. ACS.

7-Seo, J., Huang, B.T., Cheng, S.-Y, & **Champeil, E.** (2016, March). *P53 independent activation of p21 in response to Mitomycin C and Decarbamoylmitomycin C*. Paper presented at the 55th national meeting of the Society Of Toxicology, New Orleans, LA, (USA), in the proceedings of the Society Of Toxicology, abstract ID number 1316. SOT.

8-**Champeil, E.**, Cheng, S. H., Huang, B.T.$^{\Delta}$, & Seo, J.$^{\Delta}$ (2015, April). *The role of p21 in the toxicity of mitomycin C and decarbamoylmitomycin C*. Paper presented at the 106th national conference of the American Association for Cancer Research, Philadelphia, PA (USA), In Cancer Research 75 (15 Suppl) (pp. 2453), abstract ID number 2453. AACR.

9-Hsieh, V. $^{\|}$, Juzovic, Z., Petraco, N., & **Champeil, E.** (2017, February). *Discrimination of soil organic matter via nuclear magnetic resonance (NMR) spectroscopy combined with interval extended canonical variate analysis (iECVA)*. Paper presented at the 69th national meeting of the American Academy of Forensic Sciences, New Orleans, LA, (USA), in the proceedings of the American Academy of Forensic Sciences 23 (pp. 478), abstract ID number B163. AAFS.

10-Huang, B.T.$^{\Delta}$, Seo, J.$^{\Delta}$, Cheng, S. H., & **Champeil, E**. (2015, February). *Synthesis of mitomycin C and decarbamoylmitomycin C interstrand cross links. Role of p21 in their toxicity*. Paper presented at the 15th Gordon Research conference on mammalian DNA repair, Ventura, CA, (USA). In the interest of promoting the presentation of unpublished and frontier-breaking research, Gordon Research conferences do not permit publication of meeting proceedings.

11-Atchabahian, A., Mouzi, L., Adams, O.$^{\|}$, Cuff, G., & **Champeil, E**. (2014, June). *Plasma concentrations of ropivacaine following ultrasound-guided or nerve-stimulator-guided femoral nerve block: A prospective study*. Paper presented at the annual conference of the European Society of Anaesthesiology, Stockholm, (Sweden), In European Journal of Anaesthesiology, 31 (52 Suppl) (pp. 140), abstract ID number 8AP5-7. ESA, Lippincott Williams & Wilkins. Impact factor: 3.570.

12-**Champeil, E**., Lesar, C.$^{\|}$, Decatur, J., & Lukasiewicz, E.$^{\Delta}$ (2011, March). *Report on the analysis of common beverages spiked with gamma-hydroxybutyric acid (GHB) and gamma-butyrolactone (GBL) in beverages using NMR and the PURGE solvent-suppression technique*. Paper presented at the 241st national meeting of the American Chemical Society Anaheim, CA, (USA), in the proceedings of the American Chemical Society, abstract ID number ANYL-192. ACS.

13-Patrick-Saunders, L.$^{\Delta}$, & **Champeil, E**. (2011, March). *Microwave assisted methods for C-6 and C-2 modifications of 2'-deoxyguanosine*. Paper presented at the 241st national meeting of the American Chemical Society, Anaheim, CA, (USA), in the proceedings of the American Chemical Society, abstract ID number ORGN-468. ACS.

14-Lukasiewicz, E.$^{\Delta}$, Kong, W.$^{\Delta}$, & **Champeil, E**. (2011, March). *Synthesis of mitomycin C mono adducts via a post-oligomerization method*. Paper presented at the 241st national meeting of the American Chemical Society, Anaheim, CA, (USA), in the proceedings of the American Chemical Society, abstract ID number ORGN-461. ACS.

15-Adams, O.$^{\|}$, Atchabahian, A., & **Champeil E.** (2011, March). *Determination of local anesthetic levels after a peripheral nerve block by HPLC*. Paper presented at the 241st national meeting of the American Chemical Society, Anaheim, CA, (USA), in the proceedings of the American Chemical Society, abstract ID number ANYL-43. ACS.

16-**Champeil, E**. (2010, December). *Detection of drugs of abuse in beverages and human urine*. Paper presented at the annual American Chemical Society regional meeting, Long Island section, Nassau Community College, Garden City, NY, (USA). ACS.

17-Proni, G., Tan, N., Wilson, D. K. $^{\|}$, **Champeil E.**, & Levine, B. S. (2010, August). *Nuclear magnetic resonance (NMR) based study of post-mortem urines of opioid overdosed patients: Scope and limitation of the technique*. Paper presented at the 240th national meeting of the American Chemical Society Boston, MA, (USA), abstract ID TOXI-125. ACS.

18-Weng, M.-W., Zheng, Y., Jasti, V. P., **Champeil, E**., Tomasz, M., Wang, Y., Basu, A. K., & Tang M.-S. (2010, April). *UvrABC excision of interstrand crosslink mitomycin C-DNA lesion induces double-stranded*

DNA breaks. Paper presented at the 101st national conference of the American Association for Cancer Research, Washington, DC, (USA), In Cancer Research 70 (8 Suppl) (pp. 1967), abstract ID number 1967. AACR.

19-**Champeil, E.**, Liu, J.‖, Decatur, J., & Proni G. (2010, March). *Identification and quantitation of 3,4-methylenedioxy-N-methylamphetamine (MDMA, ecstasy) in human urine by ^{1}H NMR spectroscopy. Application to five cases of intoxication*. Paper presented at the 239th national meeting of the American Chemical Society, San Francisco, CA, (USA), in the proceedings of the American Chemical Society, abstract ID ANYL-199. ACS.

20-**Champeil, E.**, Liu, J.‖, Decatur, J., & Proni G. (2010, February). *NMR analysis of 3,4-methylenedioxy-N-methylamphetamine (MDMA, ecstasy) and its metabolites in Urine*. Paper presented at the 62nd national meeting of the American Academy of Forensic Sciences, Seattle, WA, (USA), in the proceedings of the American Academy of Forensic Sciences 16 (pp. 460), abstract ID number K36. AAFS.

21-Lesar, C.‖, & **Champeil E**. (2009, March). *Detection of club drugs (gamma hydroxybutyric acid and gamma butyrolactone) in drinks by NMR spectroscopy*. Paper presented at the 35th meeting of the Northeastern Association of Forensic Scientists, Long Branch, NJ, (USA). NEAFS.

22-Liu, J.‖, & **Champeil E**. (2009, March). *Detection of drugs of abuse (ecstasy) in human urine by NMR spectroscopy*" Paper presented at the 35th meeting of the Northeastern Association of Forensic Scientists, Long Branch, NJ, (USA). NEAFS.

23-**Champeil, E.**, Wilson, D. K. ‖, & Proni, G. (2009, February). *A nuclear magnetic resonance based study of urine samples containing drugs of abuse: Scope and limitations of the technique*. Paper presented at the 61st national meeting of the American Academy of Forensic Sciences, Denver, CO, (USA), in the proceedings of the American Academy of Forensic Sciences 15 (pp. 419), abstract ID number K54. AAFS.

24-**Champeil, E.**, Paz, M. M., & Tomasz, M. (2009, March). *Synthesis of two stereoisomeric deoxyribonucleoside adducts of mitomycin C*. Paper presented at the 237th national meeting of the American Chemical Society, Salt Lake City, UT, (USA), in the proceedings of the American Chemical Society, abstract ID ORGN-019. ACS.

25-**Champeil, E.**, Wilson, D.‖, & Proni G. (2008, August). *Use of NMR spectroscopy for the detection of opioids in human fluids*. Paper presented at the 236th national meeting of the American Chemical Society, Philadelphia, PA, (USA), in the proceedings of the American Chemical Society, abstract ID ANYL-368. ACS.

26-**Champeil, E.**, Paz M. M., & Tomasz M. (2008, May). *Synthesis of an oligodeoxyribonucleotide adduct of mitomycin C by the postoligomerization method, via a triamino mitosene*. Paper presented at the 40th middle atlantic regional meeting of the American Chemical Society, Queensborough Community College, Oakland Gardens, NY, (USA), abstract ID MRM-021. ACS.

27-Proni, G., Wilson, D.‖, & **Champeil E.** (2008, May). *Detection of opioids in urine by NMR spectroscopy. Preliminary studies*. Paper presented at the 40th middle atlantic regional meeting of the American Chemical Society, Queensborough Community College, Oakland Gardens, NY, (USA), abstract ID MRM-016. ACS.

28-Tregar, K.‖, **Champeil, E.**, & Proni, G. (2007, March). *A review of forensic science programs in the United States*. Paper presented at the 33rd meeting of the Northeastern Association of Forensic Scientists, Bolton Landing, NY, (USA). NEAFS.

29-**Champeil E.**, & Tomasz M. (2006, September). *Synthesis of DNA-mitomycin C adducts formed at N^2 of guanine*. Paper presented at the 232nd national meeting of the American Chemical Society, San Francisco, CA, (USA), in the proceedings of the American Chemical Society, Abstract ID AEI-073. ACS.

30-**Champeil, E.**, Paz, M. M, Clement, C. C., Zatorski, A., Ladwa, S., & Tomasz M. (2006, April). *Novel Synthesis of DNA-mitomycin C adducts formed at N^2 of guanine*. Paper presented at the 97th national

conference of the American Association for Cancer Research, Washington, DC, (USA), In Cancer Research 66 (8 Suppl) (pp. 1231), abstract ID 5249. AACR.

31-Hilmer, J.H., **Champeil, E.**, & Lakshman M.K. (2005, August). *Carbon-carbon cross coupling reactions of 6-chloropurine nucleosides at room temperature*" Paper presented at the 230th national meeting of the American Chemical Society, Washington, DC, (USA), in the proceedings of the American Chemical Society, abstract ID ORGN-412. ACS.

32-**Champeil E.**, & Lakshman M.K. (2004, August). *Synthesis of deoxyadenosine adducts of benzo[c]phenanthrene and benzo[a]pyrene*" Paper presented at the 228th national meeting of the American Chemical Society, Philadelphia, PA, (USA), in the proceedings of the American Chemical Society, abstract ID ORGN-462. ACS.

Invited presentations (12):

1-"How to write a successful SC3 NIH grant", CUNY graduate center, New York, New York **2019.**

2-"MC and DMC DNA adducts: A celebration of the life and accomplishments of Maria Tomasz" Hunter College, New York, New York **2017**. Remembrance seminar on the life and accomplishments of Professor Maria Tomasz.

3-"Synthèse d'adduits ADN de la mitomycine C et décarbamoylmitomycine C" Marseilles, France, CRCM **2017**.

4-"Correlation between the structures of MC and DMC DNA crosslinks and the role of p21 in the toxicity of DNA adducts" Queensborough Community College, New York, New York **2016**.

5-"Monitoring of chardonnay must fermentation with or without innoculation *via* quantitative NMR" University of Auckland, Auckland, New Zealand **2014** (presented during my sabbatical in New Zealand).

6-"From Dublin to New York: A serendipitous journey through molecular synthesis, forensic science and cultural diversity" Trinity College, Dublin Ireland. **2013**. Presentation given at the following event entitled "Past, present and future: The multiple roles of women chemists". The goal of the event was "to raise awareness of the role of women Chemists, in the development of their discipline and in society".

7-"NMR and the PURGE solvent-suppression technique. Analysis of common beverages spiked with GHB and GBL. Analysis of 3,4-methylenedioxy-*N*-methylamphetamine (MDMA or Ecstasy) in urine (Application to five cases of intoxication)" Bronx Community College, New York, New York **2012**.

8-"Mitomycin C and decarbamoylmitomycin C DNA adducts: Understanding the origin of their different biochemical activities" University of Connecticut, Storrs, **2011**.

9-"Use of NMR spectroscopy in forensic science: Identification of drugs of abuse in liquid matrices" Lehman College, New York, **2011**.

10-"NMR spectroscopy: a powerful tool for the identification of drug of abuse in liquid matrices" Nassau Community College, New York **2010**.

11-"Identification of gamma-hydroxybutyric acid (GHB) and gamma-butyrolactone (GBL) in beverages using NMR and the PURGE solvent-suppression technique" Queensborough Community College, New York, New York **2010**.

12-"Detection of drugs of abuse (ecstasy) in human urine by NMR spectroscopy" Department of pharmacy, Lille University, France **2009**.