

## PRESENT ADDRESS

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## Academic appointments

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2023- Present     Scientist II, University of Kentucky, Lexington, KY  
2017- 2023        Scientist I, University of Kentucky, Lexington, KY  
2015- 2017        Research Analyst, University of Kentucky, Lexington, KY  
2010 – 2015       Post-Doctoral Fellow, University of Kentucky, Lexington, KY

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## Selected Publication

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## JOURNALS

- Liu Y, Singh SK, Pattanaik S, Wang H, Yuan L, *Communications Biology*. 6, 1, 1055 (2023)
- Hou X, Singh SK, Werkman JR., Liu Y, Yuan Q, Wu X, Patra B, Sui X, Lyu R, Wang B, Liu X, Li Y, Ma W, Pattanaik S, Yuan L, *International Journal of Biological Macromolecules*, 252, 126472, (2023).
- Lim ARQ, Kong Q, Singh SK, Guo L, Yuan L, Ma, W *International Journal of Molecular Sciences*, 23, 3054 (2022).
- Qin Q, Humphry M, Gilles T, Fisher A, Patra B, Singh SK, Li D, Yang S, *Plant Biotechnol. J.* 19(11):2150-2152 (2021).
- Liu Y, Patra B, Singh SK, Paul P, Zhou Y, Li Y, Wang Y, Pattanaik S, Yuan L. *Biotechnol Lett* 43, 2085–2103 (2021)
- Lyu R, Singh SK, Liu Y, Patra B, Zhou Y, Wang B, Pattanaik S, Yuan L. *aBiotech*. 1-14 (2021).
- Singh SK, Patra B, Paul P, Pattanaik S, Yuan L. . *Plant Direct*. 2021;00:e00305 (2021).
- Liu X, Singh SK, Patra B, Liu Y, Wang B, Wang J, Pattanaik S, Yuan L. *Journal of Experimental Botany*, 72 (5), 1661–76, (2021).
- Kong Q, Singh SK, Mantyla JJ, Pattanaik S, Guo L, Yuan L, Benning C, Ma W. *Plant Physiology*, 184 (2), 658–665, (2020).
- Singh SK, Richmond MD, Pearce RC, Bailey WA, Hou X, Pattanaik S, Yuan L. *Planta* 252,

- 64, (2020)
- Singh SK, Patra B, Paul P, Liu Y, Pattanaik S, Yuan L. *Plant Science* 293, 110408, (2020)
  - Paul P\*, Singh SK\*, Patra B, Liu X, Pattanaik S, Yuan L. *Plant Physiology* 182(2), 840–856, (2020). (\*equal contributing authors)
  - Wang J, Singh SK, Geng S, Zhang S, Yuan L. *G. Planta*, 251:93 (2020).
  - Sui X, Singh SK, Patra B, Schluttenhofer C, Guo W, Pattanaik S, Yuan L. *Journal of Experimental Botany* 69(18), 2018.
  - Wang J, Wang X, Geng S, Singh SK, Wang Y, Pattanaik S, Yuan L. *Planta* 248(1):183 (2018).
  - Shen E\*, Singh SK\*, Ghosh JS, Patra B, Paul P, Pattanaik S, Yuan L. *Scientific Reports* 7:43027, (2017). (\*equal contributing authors)
  - Paul P, Singh SK, Patra SK, Sui X, Pattanaik S, Yuan L. *New Phytologist* 213(3):1107-1123. (2016).
  - Wang J\*, Singh SK\*, Du C, Li C, Fan J, Pattanaik S, Yuan L. *Frontiers in Plant Science* 2016 29; 7:1498. eCollection 201. (\*equal contributing authors)
  - Singh SK, Wu Y, Ghosh JS, Pattanaik S, Fisher C, Wang Y, Lawson D and Yuan L. *Scientific Reports* 5:18148, (2015).
  - Pattanaik S, Patra B, Singh, SK and Yuan L. *Frontiers in Plant Science* 5:259, (2014).
  - Singh SK, Heng C, Braker JD, Chan VJ, Lee CC, Jordan DB, Yuan L, Wagschal K. *Journal of Industrial Microbiology and Biotechnology* 41, 489-498, (2014).

## BOOK CHAPTERS

- Singh SK, Patra B, Singleton JJ, Liu Y, Paul P, Sui X, Suttipanta N, Pattanaik S, Yuan L. Identification and Characterization of Transcription Factors Regulating Terpenoid Indole Alkaloid Biosynthesis in *Catharanthus roseus*. *Methods in Molecular Biology*. Springer 2021 (accepted)
- Patra B, Liu Y, Singleton JJ, Singh SK, Pattanaik S, Yuan L. Virus-Induced Gene Silencing as a Tool to Study Regulation of Alkaloid Biosynthesis in Medicinal Plants. *Methods in Molecular Biology*. Springer 2021 (accepted)
- Singh SK. Explorations of Plant's Chemodiversity: Role of Nitrogen-Containing Secondary Metabolites in Plant Defense. In: Singh A., Singh I. (eds) *Molecular Aspects of Plant-Pathogen Interaction*. Springer, Singapore. (2018)

## PATENTS

- bZIP transcription factors regulate conversion of nicotine to nornicotine and reduce levels of tobacco-specific (TSNA) precursors. Yuan L, Singh SK, Pattanaik S, Lawson DM. Publication Number - WO/2020/247821, International Application No. - PCT/US2020/036426.