# Chaitanya Tondepu

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#### **OBJECTIVE**

Procure an integrative experience in the field of life sciences research to positively impact the research being conducted and continually foster my skills in research development, critical thinking, and laboratory management, in a cooperative and challenging environment. My long-term goal is to head a research group aiming to benefit public and environmental health.

#### **EDUCATION**

Aug 2012 - Bachelor of Science in Biochemistry GEORGIA INSTITUTE OF TECHNOLOGY / ATLANTA, GA
Magna Cum Laude

Aug 2018-Present Graduate Student in Neuroscience University of Georgia | Athens, GA

#### **EXPERIENCE**

KARUMBAIAH LAB, UNIVERSITY OF GEORGIA / ATHENS, GA

Jan 2019 -Present

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Graduate Research Associate in Karumbaiah Lab (Regenerative Bioscience Center, UGA)
 Studying mechanisms of immune suppression in Glioblastomas and how to improve immune response

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY / DURHAM, NC

Nov 2016 -June 2018

ORISE Research Fellow (National Health Environmental Effects Laboratory, US EPA)

- Project lead for research project characterizing the metabolic profiles of thyroid hormones in primary human adult and pediatric hepatocytes under the supervision of mentor Dr. Vicki Richardson
- Responsible for developing and functionalizing methods to extract thyroid hormones from cell media and lysate
- Plated and treated primary cell types (i.e. hepatocytes and colonocytes) to test and modify methods for experimentation
- Analyzed data through UHPLC-MS and Xcalibur software

UNITED STATES FOOD AND DRUG ADMINISTRATION / ST. LOUIS, MO

May 2016 -Aug 2016

#### ORISE Research Fellow (Department of Pharmaceutical Analysis, US FDA)

- Project lead, under supervision of mentor Dr. Jason Rodriguez, for research project improving quality control
  protocols for unapproved drugs including Ciprofloxacin, Amoxicillin, Acyclovir, Doxycycline coming from
  international markets
- Compared the efficiency and accuracy between our newly developed Raman spectroscopy method coupled with chemometric analysis, and the standard HPLC method for drug quality control analysis
- Published one primary-author and one secondary-author paper from findings

GEORGIA INSTITUTE OF TECHNOLOGY / ATLANTA, GA

Jan 2015 – Dec 2015

## **Undergraduate Research Student**

- Collaborated with interdisciplinary research group of undergraduate students to plan experiments to bioengineer janus particles for purposes in immunoassays, environmental cleanup, and drug delivery
- Developed particles half coated with platinum and protein G to collect antibodies from a B-cell
- Engineered and studied efficacy of janus particles coated with platinum and enzyme HRP to exploit its reaction with  $H_2O_2$  for mobility and detection

Jan 2015 -

Dec 2015

#### **Supplemental Instructor**

- Provided collaborative biweekly/triweekly sessions with activities and worksheets with integrative strategies for students in Multivariable Calculus and Linear Algebra
- Worked closely with course lecturer to discuss core content to be addressed in sessions

July 2015 – Dec 2015

#### Information Technology (IT) Student Assistant

- Attended daily staff tickets to the IT department and maintained department office
- Employed remote access software and setup hardware to image and update computers

#### **PUBLICATIONS**

- Navin, C.V.; <u>Tondepu, C.</u>; Toth, R.; Lawson, L.S.; Rodriguez, J. D. Quantiative Determinations Using Portable Raman Spectrometers. Journal of Pharmaceutical and Biomedical Analysis. 2016, https://doi.org/10.1016/j.jpba.2016.12.020
- 2. <u>Tondepu, C.</u>; Toth, R.; Navin, C.V.; Lawson, L.S.; Rodriguez, J. D. Screening of Unapproved Drugs Using Portable Raman Spectroscopy. Analytica Chimica Acta. 2017, https://doi.org/10.1016/j.aca.2017.04.016

#### **SKILLS**

- Laboratory cell culture, animal handling (scruffing, IP injection, perfusion, stereotactic surgery), sterile/aseptic
  technique, SPE, gel electrophoresis (agarose, SDS-PAGE), ELISA, PCR, flow injection analysis, mass
  spectrometry, liquid chromatography (HPLC), gas chromatography, UV-Vis Spectrophotometer, DigiMelt Melting
  Point apparatus, Recrystallization, Distillation, Column Chromatography, Polarimetry, CD Spectroscopy,
  dissolution
- Programming Languages Java, Python, Jython, R programming, and HTML
- Productive Software Microsoft Office, Mac OSX, PyMol, MatLab, GraphPad, BioChemDraw, MNova, PLS Toolbox, and AutoDock Vina
- Spoken Languages Fluent: English & Telugu, Professional Proficiency: Spanish, Limited Proficiency: Hindi

### PROFESSIONAL REFERENCES

Vicki Richardson, PhD, Biologist, United States Environmental Protection Agency (US EPA)

Email richardson.vicki@epa.gov

Phone (919) 541-3917

• Jason Rodriguez, PhD, Chemist, United States Food and Drug Administration (US FDA)

Email jason.rodriguez@fda.hhs.gov

Phone (314) 539-3855

• Todd Sulchek, PhD, Associate Professor, Georgia Institute of Technology

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