

Curriculum Vitae

Mautusi Mitra, Ph.D.

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UWG Mitra Lab website: <http://www.westga.edu/mitralab/>
UWG Mitra lab Facebook link: <https://www.facebook.com/pages/UWG-Mitra-Lab/1618923318377133>

EDUCATION

Ph.D. in Plant Biology, December, 2003, Louisiana State University (Baton Rouge, LA, USA),
Department of Biological Sciences.

Dissertation Title: Carbonic anhydrase and carbonic anhydrase like genes of
Chlamydomonas reinhardtii (2003).

Advisor: Dr. James V. Moroney

M.S. in Botany, 1991. University of Calcutta (Kolkata, India), Department of Botany.

Special focus: Phycology (1991)

Advisors: Dr. Ruma Paul and Dr. Probir Chatterjee

B.S. with Honors in Botany, 1989. University of Calcutta (India) [Presidency College, Kolkata],
Department of Botany, Minors: Physiology and Geology.

PROFESSIONAL APPOINTMENTS

August 2015 - present

Tenured, Associate Professor, Department of Biology/MSAT, University of West
Georgia

August 2009 - July 2015

Assistant Professor (Tenure-Track), Department of Biology, University of West Georgia

November 2008 - July 2009

Associate specialist, Department of Plant & Microbial Biology, University of California,
Berkeley; Supervisor: Dr. Anastasios Melis

March 2004 - November 2008

Postdoctoral research scholar, Department of Plant & Microbial Biology, University of
California, Berkeley; Supervisor: Dr. Anastasios Melis

Spring 2008

Instructor in Medical Microbiology, University of California, Berkeley Extension

January 1997 - May 2003

Graduate Teaching Assistant, Department of Biological Sciences, Louisiana State University

August 2003 - December 2003

Graduate Research Assistant, Dr. James V. Moroney's Laboratory, Department of Biological Sciences, Louisiana State University

TEACHING EXPERIENCES

August 2009 - present

University of West Georgia, Department of Biology, Carrollton, GA

Courses taught: (S = spring, F = fall)

F2019 – S2020: BIOL 4985 (now BIOL 4134) (Advanced Molecular Biology & Bioinformatics)

F2019, F2020: XIDS 2002 (First Year Seminar)

F2009 - F2020: BIOL 3134 (Cell and Molecular Biology)

S2010: BIOL 1110 (Biological Diversity)

F2010- F2011; F2012: BIOL 2107 (Principles of Biology I for Biology majors)

F2010: BIOL 6984 (Graduate Biology seminar for MS Students)

F2011 - S2012; F2017 - F2018; S2020: BIOL 4503/6503 (Biological Perspectives: Biochemistry)

F2011, F2012, F2013, S2015, F2016, S2018, F2020: BIOL 4984 (Senior Seminar for Biology majors)

June 2019

Guest instructor for Agricultural Science Cohort, Georgia Governor's Honors program (GHP), Berry College (Mt Berry, GA).

Topics taught: Molecular Biology, Plant Physiology and Bioinformatics

Spring 2008

Instructor, University of California, Berkeley, Extension

Course taught: Introduction to Medical Microbiology (EDP# 413260; three semester units in Public Health)

Spring 2008 and Spring 2009

Guest instructor, UC Berkeley, Department of Plant and Microbial Biology

Course taught: Plant Biochemistry of Biofuels: Concepts and Foundations (PLANTBIO222)

Fall 2006

Guest instructor, UC Berkeley, Department of Plant and Microbial Biology

Course: Plant Biochemistry (200B 001LEC)

Spring 1997- Spring 2003

Laboratory Teaching Assistant, Louisiana State University, Department of Biological Sciences

Courses:

Introductory Biology for science majors (BIOL 1208; seven semesters)

Microorganisms and Man Laboratory (Microbiology for non-majors (BIOL1012; one semester)

General Microbiology (Microbiology for Microbiology majors) (BIOL 2051; three semesters)

Introductory Plant Physiology (BIOL3060; one semester)

RESEARCH INTERESTS

My research is focused on Microbial Physiology and Genomics with an integration of research and teaching. I have three research projects that are currently underway in my lab. These are: **1)** A project centered on using functional genomics to study photo-acclimation, photo-protection and photosynthetic pigment metabolism in the green micro-alga *Chlamydomonas reinhardtii* (a eukaryotic microbe); **2)** A project focused on the isolation and characterization of novel bacterial strains that have potential for environmental bioremediation and, **3)** A SEER (Scientists Engaged in Educational Research) project that originated from the American Society of Plant Biologists' funded Plant BLOOME project. The BLOOME project centered on designing inexpensive, fun hands-on-activities using the green micro-alga, *Chlamydomonas* to teach Green biology to K4-K16 students.

MENTORING OF K4 - K16 STUDENTS (F= fall; S= spring; SU= summer)

F2014 - present: Mentored 25 undergraduate research students and three high school students (The Heritage School [Newnan, GA] and Carrollton High school [Carrollton, GA] and Advanced Academy of Georgia high school students). Served in one graduate committee (M.S. degree, thesis-track).

F2009 - SU2014: Mentored 34 undergraduate research students. Mentored research of three Advanced Academy of Georgia high school students. Served as the thesis director of one graduate (M.S. degree) student; served in two graduate committees (M.S. degree, thesis-track and M.S. degree, non-thesis track); trained three research volunteers who were non-UWG students.

PUBLICATIONS

Peer-reviewed Research Articles (* denotes high school student co-author; ** denotes undergraduate student co-author; * denotes graduate student co-author, unlabeled denotes UWG Biology lecturer and faculty)**

- Mitra M**, **Broom SM, **Pinto K, *Wellons SD, **Roberts AD. 2020. Engaging inexpensive hands-on activities using *Chlamydomonas reinhardtii* (a green micro-alga) beads to teach the interplay of photosynthesis and cellular respiration to K4–K16 Biology students. PeerJ -The Journal of Life and Environmental Sciences 8:e9817
<https://doi.org/10.7717/peerj.9817>
- Mitra M**, **Nguyen KMAK, **Box TW, **Gilpin JS, **Hamby SR, *Berry TL and Duckett EH. Isolation and characterization of a novel *Sphingobium yanoikuyae* strain variant that uses biohazardous saturated hydrocarbons and aromatic compounds as sole carbon sources [version 1; peer review: 2 approved]. F1000Research 2020, 9:767
<https://doi.org/10.12688/f1000research.25284.1>
- Mitra M**, **Nguyen KMAK, **Box TW **Gilpin JS, **Hamby SR, *Berry TL and Duckett EH. Isolation and characterization of a novel bacterial strain from a Tris-Acetate-Phosphate agar medium plate of the green micro-alga *Chlamydomonas reinhardtii* that can utilize common environmental pollutants as a carbon source [version 1; peer review: 3 approved]. F1000Research 2020, 9:656
<https://doi.org/10.12688/f1000research.24680.1>
- *** Grovenstein PB, ** Lankford KD, ** Wilson DA, ** Gaston KA, ** Perera S and **Mitra M**. Identification and molecular characterization of a novel *Chlamydomonas reinhardtii* mutant defective in chlorophyll biosynthesis, F1000Research 2013, 2:138
<https://doi.org/10.12688/f1000research.2-138.v2>.
- *** Grovenstein PB, **Wilson DA, *Lennox CG, **Smith KP, **Contractor AA, **Mincey JL, **Lankford KD, Smith JM, **Haye TC and **Mitra M**. Identification and molecular characterization of the second *Chlamydomonas gun4* mutant, *gun4-II*, F1000Research 2013, 2:142 (<https://doi.org/10.12688/f1000research.2-142.v2>).
- Mitra M**, ***Kirst H, Dewez D and Melis A. Modulation of the light- harvesting chlorophyll antenna size in *Chlamydomonas reinhardtii* by TLA1 gene over-expression and RNA interference. Phil. Trans. R. Soc. B, November, 2012 367: 3430-3443.
doi: [10.1098/rstb.2012.0229](https://doi.org/10.1098/rstb.2012.0229).
- Mitra M**, Dewez D, ***Gines García-Cerdán J and Melis A. Polyclonal antibodies against the TLA1 protein also recognize with high specificity the D2 reaction center protein of PSII in the green alga *Chlamydomonas reinhardtii*. Photosynthesis Research, 2012, 112: 39-47. doi: [10.1007/s11120-012-9733-x](https://doi.org/10.1007/s11120-012-9733-x).
- Mitra M**, **Ng S and Melis A. The TLA1 protein family members contain a variant of the plain MOV34/MPN domain. American J. Biochem & Mol. Bio, January 2012, 2:1-18. doi: [10.3923/ajbmb.2012.1.18](https://doi.org/10.3923/ajbmb.2012.1.18).
- Mitra M** and Melis A. Genetic and biochemical analysis of the TLA1 gene in *Chlamydomonas reinhardtii*. Planta, 2010, 231:729-740. doi: [10.1007/s00425-009-1083-3](https://doi.org/10.1007/s00425-009-1083-3).

Mitra M and Melis A. Optical properties of microalgae for enhanced biofuels production, *Optics Express*, 2008, 16: 21807-21820. <https://doi.org/10.1364/OE.16.021807> (This article was also selected out of all the articles published every month in different journals published by Optical Society of America, for publication in “The virtual Journal for Bio Medical optics” published by Optical Society of America).

Tetali S, **Mitra M** and Melis A. Development of the light-harvesting chlorophyll antenna in the green alga *Chlamydomonas reinhardtii* is regulated by the novel TLA1 gene, *Planta*, 2007, 225: 813-829. doi:[10.1007/s00425-006-0392-z](https://doi.org/10.1007/s00425-006-0392-z).

Bartlett SG, **Mitra M** and JV Moroney. CO₂ concentrating mechanisms. A book chapter in the *Advances in Photosynthesis and Respiration* series titled "The structure and function of plastids"; volume 23, pp 253-271; edited by Wise RR and Hooper JK; Berlin/Heidelberg, Germany, Springer, 2006. <https://link.springer.com/book/10.1007/978-1-4020-4061-0>.

Mitra M, Mason C, **Lato SM, ***Ynalvez, RA, Xiao Y and Moroney JV. The three carbonic anhydrase families of *Chlamydomonas reinhardtii*. *Canadian Journal of Botany*, July 2005, 83: 780-795. doi: [10.1139/b05-065](https://doi.org/10.1139/b05-065).

Mitra M, **Lato S, ***Ynalvez R and Moroney JV. Identification of a new chloroplast carbonic anhydrase in *Chlamydomonas reinhardtii*. *Plant Physiology*, 2004, 135:173-182. doi: [10.1104/pp.103.037283](https://doi.org/10.1104/pp.103.037283).

Supervised Undergraduate and High School Student Peer-Reviewed Research Publications in Conference Proceedings: (* denotes high school student co-author) Articles can be found in the NCUR archive.

1. Paper Title: Identification of a Novel Gene That Plays a Role in High Light Tolerance in the Green Micro-alga *Chlamydomonas reinhardtii*.

Authors: Kevin Nguyen, Ja'von Swint, Joel Page III, Kenneth Kim, Katherine Smith, Tai Truong, and Kasey Swilley

Supervisor: **Dr. Mautusi Mitra**; Proceedings of the National Conference of Undergraduate Research (NCUR), 2017 p407-417 (**published on October 19th 2017**).

2. Paper Title: Employing functional genomics to study chlorophyll biosynthesis in the green micro-alga *Chlamydomonas reinhardtii*.

Authors: Tashana C. Haye, Darryel A. Wilson, *Abigail R. Lennox, Alisha A. Contractor.

Supervisor: **Dr. Mautusi Mitra**; Proceedings of the National Conference of Undergraduate Research (NCUR), 2013 p256-264 (**published on 14th October, 2013**).

3. Paper Title: Utilization of Functional Genomics to Study Regulation of Chlorophyll Biosynthetic Pathways in the Unicellular Green Alga *Chlamydomonas reinhardtii*.

Authors: Kathryn D. Lankford, Kelsey A. Gaston, Phillip B. Grovenstein, and Surangi Perera

Supervisor: **Dr. Mautusi Mitra**; Proceedings of the National Conference of Undergraduate Research (NCUR), 2012 pp 589- 597 (**published December 4th, 2012**).

4. Paper Title: Functional genomics of eukaryotic oxygenic photosynthesis in the model unicellular green microalga *Chlamydomonas reinhardtii*.

Authors: Surangi Perera, Kelsey Gaston, Phillip Grovenstein, *Justin Puckett, Yakema Sheats;
Supervisor: **Dr. Mautusi Mitra**; Proceedings of the National Conference of Undergraduate Research (NCUR), 2011 p 805-813 (**published on 27th February, 2012**).

Newsletter article:

Mautusi Mitra: Education Forum: ASPB Educational Outreach: A Rock Star Booth at NSTA 2018. ASPB News. The Newsletter of the American Society of Plant Biologists. May/June 2018, volume 45, number 3, pages 27- 28. <https://aspb.org/newsletter/archive/2018/MayJun18.pdf>

Newspaper article:

Mautusi Mitra: Article title: A more effective evaluation method for higher education. The Evollution (a non-traditional education newspaper), May, 25th, 2012. https://evollution.com/programming/program_planning/a-more-effective-evaluation-method-for-higher-education/

PUBLISHED NUCLEOTIDE SEQUENCES, DATASETS AND PROTOCOLS IN OPEN ACCESS DATABASE/REPOSITORY:

A. Nucleotide sequences submitted in National Center for Biotechnology Information [NCBI]: (*denotes High school student collaborator; **denotes undergraduate student collaborator)

NCBI, GenBank: DEFINITION: *Sphingobium yanoikuyae* strain PR86 variant 16S ribosomal RNA gene, partial sequence. ACCESSION: MN633285; VERSION: MN633285.1. **Mitra, M., **Nguyen,K., *Berry,T. and **Box,T.** Published (11-07-2019) Biology, University of West Georgia, 1601, Maple street, Carrollton, GA 30118, USA. <https://www.ncbi.nlm.nih.gov/nucleotide/MN633285.1/>

NCBI, GenBank: DEFINITION: *Microbacterium binotii* strain PK1-12M variant 16S ribosomal RNA gene, partial sequence. ACCESSION: MN633284; VERSION: MN633284.1. **Mitra, M., **Nguyen,K., *Berry,T. and **Box,T.** Published (11-07-2019) Biology, University of West Georgia, 1601, Maple street, Carrollton, GA 30118, USA. <https://www.ncbi.nlm.nih.gov/nucleotide/MN633284.1/>

NCBI, GenBank: DEFINITION: Bacterium strain clone LIB091_C05_1243 variant 16S ribosomal RNA gene, partial sequence. ACCESSION: MN633292 VERSION: MN633292.1. **Mitra, M., **Nguyen,K., *Berry,T. and **Box,T.** Published (11-07-2019) Biology, University of West Georgia, 1601, Maple street, Carrollton, GA 30118, USA. <https://www.ncbi.nlm.nih.gov/nucleotide/MN633292.1/>

B. Published data collections and datasets in open access repository Figshare: (*denotes High school student collaborator; **denotes undergraduate student collaborator; * denotes Lecturer, Biology)**

Figshare data collection: Mitra, Mautusi (2020): Data for Version 1 of "Isolation and characterization of a novel *Sphingobium yanoikuyae* strain variant that uses biohazardous saturated hydrocarbons and aromatic compounds as sole carbon sources". f1000research.com. Collection. <https://doi.org/10.6084/m9.figshare.c.5065964> (co-authors: **Kevin Manoap-Anh-Khoa Nguyen, **Taylor Wayland Box, ** Jesse Scott Gilpin, ** Seth Ryan Hamby, **Taylor Lynne Berry and ***Erin Harper Duckett; Figshare data collection does not show co-author names but the individual dataset in the collection shows co-author names)

Figshare data collection: Mitra, Mautusi (2020): Data for Version 1 of "Isolation and characterization of a novel bacterial strain from a Tris-Acetate-Phosphate agar medium plate of the green micro-alga *Chlamydomonas reinhardtii* that can utilize common environmental pollutants as a carbon source". f1000research.com. Collection. <https://doi.org/10.6084/m9.figshare.c.5059022.v1> (co-authors: **Kevin Manoap-Anh-Khoa Nguyen, **Taylor Wayland Box, ** Jesse Scott Gilpin, ** Seth Ryan Hamby, **Taylor Lynne Berry and ***Erin Harper Duckett; Figshare data collection does not show co-author names but the individual dataset in the collection shows co-author names)

Figshare dataset: Mitra, Mautusi; **Broom, Sara; **Pinto, Kysis; *Wellons, Sovi-Mya Doan; **Roberts, Ariel Dominique (2020): pH data with statistical analyses from experiments under light and darkness using *Chlamydomonas reinhardtii* bead bracelets and glass vials containing *Chlamydomonas* beads. figshare. Dataset. <https://doi.org/10.6084/m9.figshare.12344024.v1>.

C. Published Protocols in Protocol.io (*denotes high school student collaborator; **denotes undergraduate student collaborator)

Mautusi Mitra 2020. A green micro-algal growth media modified for use as a stringent minimal media for bacteria. **protocols.io** [dx.doi.org/10.17504/protocols.io.bgzujx6w](https://doi.org/10.17504/protocols.io.bgzujx6w)

Mautusi Mitra, **Sara Broom, **Kysis Pinto, *Sovi-Mya Doan Wellons, **Ariel Dominique Roberts 2020. Making inexpensive light-powered *Chlamydomonas reinhardtii* (a green micro-alga) bead bracelets/necklaces for teaching the interplay of photosynthesis and cellular respiration to K4-K16 students. **protocols.io** [dx.doi.org/10.17504/protocols.io.bgpyjvpw](https://doi.org/10.17504/protocols.io.bgpyjvpw)

RESEARCH PATENT

Invention title: Suppression of *TLA1* gene expression for improved solar conversion efficiency and photosynthetic productivity in plants and algae; US patent #: US20080120749A1/US7745696B2; Date of patent: 06-29-2010; expires on 12-25-2028. Inventors: Anastasios Melis and **Mautusi Mitra**. <https://patents.google.com/patent/US7745696B2/en>. To date this patent has been purchased commercially by several biotech companies in USA.

I-POSTER AND EDUCATIONAL VIDEOS FROM THE PLANT-BLOOME PROJECT:

A. Interactive Poster:

2019: *Chlamydomonas reinhardtii*: A “Rock Star” Green Biology Teaching Tool. **Mautusi Mitra**, August 4th, Plant Biology 2019, San Jose, CA (**Interactive E-poster**). [This I-poster was selected to be used as an excellent example of i-poster in Plant Biology 2020 Worldwide Summit, July 27th-July 30th 2020.

<https://aspb2019-conferencemanagers.ipostersessions.com/default.aspx?s=6A-42-C4-C2-1A-91-1A-42-F3-2C-CB-70-EB-CC-28-A5>

B. You tube mini video links for light-powered green algae bead bracelets/necklaces (Participants: *denote High school student; **denote undergraduate student; *Elementary school student)**

2019: <https://youtu.be/u4BbZ29qIWQ> ****Taylor Wayland Box**, UWG

<https://youtu.be/eIxbzeHW8IM> ****Taylor Wayland Box**, UWG

<https://youtu.be/A7VIjLDGSCc> * **Sovi-Mya Doan Wellons**, The Heritage School, Newnan, GA

https://youtu.be/vh_1ASpQgS8 *** **Victoria Johnson**, Jones Elementary school, Bremen, GA and Dr. Melissa Johnson (Associate Professor, UWG, Biology)

<https://youtu.be/enctr0yhWQ8> *** **Victoria Johnson**, Jones Elementary school, Bremen, GA and **Dr. Melissa Johnson** (Associate Professor, UWG, Biology)

<https://youtu.be/08GCYc4Nuvo> **Dr. Mautusi Mitra**, UWG

CONFERENCE PRESENTATIONS

PI's PRESENTATIONS (*denotes High school student collaborator; ** denotes graduate student collaborator, underlined denotes postdoc collaborator and faculty; unlabeled denotes undergrads)

2019: *Chlamydomonas reinhardtii*: A “Rock Star” Green Biology Teaching Tool, **Mitra M**, Education session, Plant Biology, San Jose, CA, August 4th (**Invited symposium speaker; competitive selection**)

Chlamydomonas reinhardtii: A “Rock Star” Green Biology Teaching Tool, **Mitra M**, Plant Biology, San Jose, CA, August 4th. (**Interactive E-poster**)

Chlamydomonas reinhardtii: A “Rock Star” Plant Biology Teaching tool for K-16 students. **Mitra M**. Meeting of the southern section of the American Society of Plant Biologists, Watt Family Innovation Center, Clemson University, Clemson, South Carolina, March 17th. (**Invited speaker**)

2018: Employment of *Chlamydomonas reinhardtii*/Chlamy, a Green Micro Alga (“green yeast”) for K16 Biology Education. **Mitra M**. Plant Biology 2018, Montreal Canada, 14th July - 18th July. (**Poster**)

- 2017:** Molecular characterization of two high light-sensitive *Chlamydomonas reinhardtii* mutants, defective in a novel functionally uncharacterized gene LSR1. **Mitra M**, Nguyen K, Swint, J, Page J, Smith KP, Truong T, Kim K. Photosynthesis Gordon Research Conference, Newry, ME, July 16th - July 21st. (**Poster and a Flash talk**)
- Identification of a novel gene LSR1 that plays a role in high light tolerance in the green micro-alga *Chlamydomonas reinhardtii*. **Mitra M**, Nguyen K, Swint J, Page J, Smith KP, Truong T, Kim K. Southern sectional-American Society of Plant Biologists meeting, Orlando, FL, April 8th -10th. (**Invited speaker**)
- 2014:** Identification and molecular characterization of a chlorophyll deficient non-photosynthetic *Chlamydomonas reinhardtii* mutant. **Mitra M**, **Grovenstein PB, Smith KP, Truong T, Hays TC, Fuller T and Grimm B. American Society of Plant Biologists southern sectional meeting, Lexington, KY, March 29th- 31st. (**Invited speaker**)
- 2013:** Characterization of two *Chlamydomonas reinhardtii* mutants defective in chlorophyll biosynthesis. **Mitra M**, **Grovenstein PB, Wilson DA, Lankford KD, *Lennox CG, Smith KP, Brzezowski P, Grimm B, Hays TC and Gaston KA. The 16th International Congress on Photosynthesis Research, St. Louis, August 11th – 16th, 2013. (**Poster**)
- 2012:** Employing functional genomics to study the regulation of tetrapyrrole metabolism in the green microalga *Chlamydomonas reinhardtii*. **Mitra M**, **Grovenstein P, Schlicke H, Grimm B, Wilson DA, Lankford KD, Gaston KA, and Smith J. The Annual Meeting of the American Society of Plant Biologists, Austin, Texas, July 20th - July 24th. (**Poster**)
- Employing functional genomics to study the regulation of tetrapyrrole metabolism in the green microalga *Chlamydomonas reinhardtii*. **Mitra M**, Brzezowski P, **Grovenstein P, Schlicke H, Wilson DA, Gaston KA, Lankford KD, Smith J and Grimm B. 15th International Conference on the Cell and Molecular Biology of Chlamydomonas, Potsdam, Germany, June 5th- 10th. (**Poster**)
- TLA1, a novel gene for the regulation of the chlorophyll antenna size in the green microalga *Chlamydomonas reinhardtii*. **Mitra M**, **Kirst H, Dewez D, Ng, S and Melis A. Southern Sectional ASPB meeting, South Carolina, Myrtle Beach, March 3rd-5th. (**Invited speaker**)
- 2011:** Regulation of the chlorophyll antenna size in *Chlamydomonas reinhardtii* by TLA1 gene over-expression and RNA interference. **Mitra M**, **Kirst H, Dewez D, Ng S and Melis A. Presented at the 37th Annual Midwest/Southeast Photosynthesis Meeting, Marshall, Indiana, November 11th-13th. (**Invited speaker**)
- Specific polyclonal antibodies against the 23 kDa TLA1 protein also recognize with high affinity a 28 kDa protein in the green alga *Chlamydomonas reinhardtii*. **Mitra M**, Dewez D, Bachman N and Melis A. Presented at the 28th Eastern Regional Photosynthesis meeting, Marine Biological Laboratory, Woods Hole, MA, April 1st- 3rd. (**Invited speaker and Poster**)
- 2010:** Engaging high school seniors and college freshman undergraduates to basic molecular biology-based bioinformatics research projects. **Mitra M** and *Ross B (Advanced Academy of Georgia high school student). Presented at the STEM Institute at the University of West Georgia, Carrollton, GA, February, 2010. (**Invited speaker**)

- Regulation of the chlorophyll antenna size in *Chlamydomonas reinhardtii* by TLA1 gene over-expression and RNA interference. **Mitra M**, **Kirst H, Dewez D, Ng S and Melis A. Presented at the 19th Western Photosynthesis Conference, Asilomar, CA, January 7th-10th. **(Poster)**
- 2009:** Genetic analysis of *Chlamydomonas reinhardtii*: Characterization of *RDPI*, a novel gene whose 3'UTR overlaps with the 5'UTR of the *TLA1* gene. **Mitra M** and Melis A. Presented at the 18th Western Photosynthesis Conference, Asilomar, CA, January. **(Poster)**
- 2008:** *TLA1*, a novel gene in the regulation of the photosynthetic chlorophyll antenna size. **Mitra M**, **Kirst H and Melis A. Presented at the 34th American Society for Photobiology Meeting, Burlingame, CA, June 20th-25th. **(Invited speaker)**
- 2007:** TLA1, a novel protein that functions in the regulation of the chlorophyll antenna size in *Chlamydomonas reinhardtii*. **Mitra M**, **Kirst H, Titali S and Melis A. Presented at the 14th International Congress on Photosynthesis (organized by the International Society of Photosynthesis Research), Glasgow, Scotland, July 22nd-27th. **(Poster)**
- 2006:** Chlorophyll antenna size adjustments in *Chlamydomonas* involve coordinate regulations of *TLA1*, *CAO* and *Lhcb* gene expressions. **Mitra M**, Kanakagiri S and Melis A. Presented at the Gordon Research conference, Photosynthesis, Smithfield, RI July 2nd-7th. **(Invited speaker)**
- Chlorophyll antenna size adjustments in *Chlamydomonas* involve coordinate regulations of *TLA1*, *CAO* and *Lhcb* gene expressions. **Mitra M**, Kanakagiri S and Melis A. Presented at the 15th Western Photosynthesis Conference, Antenna system and light harvesting session, Asilomar, CA, January. **(Invited speaker)**
- 2005:** Chlorophyll antenna size adjustments in *Chlamydomonas* involve coordinate regulations of *TLA1*, *CAO* and *Lhcb* gene expressions. **Mitra M**, Kanakagiri S and Melis A. Presented at the Plant Biology 2005, Photosynthesis mini-symposium I, Seattle, WA, July 16th-20th. **(Invited speaker)**
- 2003:** Identification of a novel intracellular beta carbonic anhydrase in *Chlamydomonas reinhardtii* that is distinct from the mitochondrial forms of the enzyme. **Mitra M**, Lato S, **Ynalvez R and Moroney JV. Presented at the American Society of Plant Biologists Annual Meeting at Honolulu, HI. July 25th-30th. **(Poster)**
- Identification of a novel intracellular beta carbonic anhydrase in *Chlamydomonas reinhardtii* that is distinct from the mitochondrial forms of the enzyme. **Mitra M**, Lato S, **Ynalvez R and Moroney JV. Presented at the Southern Sectional Meeting of the American Society of Plant Biologists. Denton, TX, March 15th-17th. **(Oral presentation)**
- 1999:** Characterization of an alpha carbonic anhydrase in higher plants. **Mitra M** and Moroney JV. Presented at the Southern Sectional Meeting of the American Society of Plant Biologists. Baton Rouge, LA, March. **(Oral presentation)**

INVITED SEMINARS

- 2018:** Chlamy (“Green yeast”), a ROCK STAR Biology Teaching Tool. Wolf Science Café, September 10th, Red Rock Room, Hudson Mills, Carrollton, GA.

2015: Functional genomics of eukaryotic oxygenic photosynthesis and photosynthetic pigment metabolism in the model green micro-alga *Chlamydomonas reinhardtii*. December 22nd, The Centenary Lecture Series on “Emerging Trends in Plant Sciences” at the Department of Botany, Ashutosh College, Kolkata, India.

Functional genomics of eukaryotic oxygenic photosynthesis and photosynthetic pigment metabolism in the model green micro-alga *Chlamydomonas reinhardtii*. University of West Alabama, Department of Environmental Sciences and Biology, Livingston, AL, 29th October.

Functional genomics of eukaryotic oxygenic photosynthesis and photosynthetic pigment metabolism in the model green micro-alga *Chlamydomonas reinhardtii*. University of South Carolina, Department of Biology & Geology, Aiken, SC, March 20th.

2013: Functional genomics of eukaryotic oxygenic photosynthesis under different light irradiances in the model green micro-alga *Chlamydomonas reinhardtii*. COSM Dean’s seminar, UWG, 1st November.

2012: Employing functional genomics to study the regulation of tetrapyrrole metabolism in the green microalga *Chlamydomonas reinhardtii*. Department of Plant Physiology, Humboldt University, Germany, 18th May.

2009: Approaches, Barriers and Supports in Biological Science Research. Doctoral panel on Research methods and approaches. Department of Education at University of West Georgia, Carrollton, GA; October 3rd.

TLA1, a novel gene involved in the regulation of the chlorophyll antenna size in the green alga *Chlamydomonas reinhardtii*. Louisiana State University, LA, Department of Biological Sciences, Baton Rouge, LA, 19th February.

2004: Carbonic anhydrase and carbonic anhydrase like genes and their roles in carbon dioxide concentrating mechanisms (CCM). Plant Biology Department, Bose Institute, Calcutta, India, 20th October, 2004.

Carbonic anhydrase and carbonic anhydrase like genes and their roles in carbon dioxide concentrating mechanisms (CCM). Nagarjuna Fertilizers and Chemical limited, Hydrogen research Unit, Hyderabad, India, 14th October.

Genes for the regulation of chlorophyll antenna size in photosynthetic organisms & its application in photosynthetic hydrogen production. Nagarjuna Fertilizers and Chemical limited, Hydrogen Research Unit, Hyderabad, India, 13th October.

STUDENT RESEARCH PRESENTATIONS AT CONFERENCES (presenters’ names are in bold; * denotes high school student; ** denotes graduate student; postdoc and faculty names are underlined; unlabeled denotes undergrads; research awards/fellowship stated beside the presentation).

2019: Investigation of Bacterial Contamination on Acetate Agar Media Plates of *Chlamydomonas reinhardtii*. **Seth Hamby**, Kevin Nguyen, Taylor Box, *Taylor Berry and Mautusi Mitra. UWG Scholars Day, Campus Center Ballroom April 2nd. (**Poster presentation**)

Biochemical and Molecular Characterization of Bacterial Contaminants Isolated from TAP Agar Media Plates of *Chlamydomonas reinhardtii*, a Green Micro-alga. **Taylor Box**, Kevin Nguyen, Seth Hamby, *Taylor Berry and Mautusi Mitra. UWG Scholars Day, Campus Center Ballroom, April 2nd, 2019. (**Oral presentation**)

Employing the green micro-alga *Chlamydomonas reinhardtii* as a Photosynthesis Teaching Tool for K-16 students. **Sara Broom, Kysis Pinto, Ariel Roberts** and Mautusi Mitra. UWG Scholars Day, Campus Center Ballroom, April 2nd. (**Poster presentation**)

Investigation of Bacterial Contamination on Acetate Agar Media Plates of *Chlamydomonas reinhardtii*. **Seth Hamby**, Kevin Nguyen, **Taylor Box**, *Taylor Berry Erin Duckett and Mautusi Mitra. University of West Alabama Research Symposium, Livingston, Alabama, March 5th. (**Poster presentation**)

2018: Molecular characterization of two high light sensitive *Chlamydomonas reinhardtii* mutants, defective in a novel functionally uncharacterized gene. **Kevin Nguyen**, Kenneth Kim, Joseph Okafor, Ja'von Swint, Joel Page III, Katherine Smith, Tai Truong, and Mautusi Mitra. UWG Biology Expo, UWG Biology Commons, Carrollton, GA, October 1st. (**Poster presentation**)

Employment of *Chlamydomonas reinhardtii*/Chlamy, a Green Micro Alga (“green yeast”) for K16 Biology Education. **Kevin Nguyen, Joseph Okafor** and Mautusi Mitra. UWG Biology Expo, UWG Biology Commons, Carrollton, GA, October 1st. (**Poster presentation**)

Molecular characterization of two high light sensitive *Chlamydomonas reinhardtii* mutants, defective in a novel functionally uncharacterized gene LSR1. **Kenneth Kim**, Kevin Nguyen, Joseph Okafor, Ja'von Swint, Joel Page III, Katherine Smith, Tai Truong, and Mautusi Mitra. Plant Biology 2018, Montreal Canada, 14th July -18th July. (**ASPB-SURF poster presentation; Kenneth Kim was awarded a summer undergraduate research fellowship from the American Society of Plant Biologists**)

Molecular Characterization of Two High Light-Sensitive Mutants of *Chlamydomonas reinhardtii*, Defective in a Novel Uncharacterized Gene, LSR1. **Kenneth Kim** and Mautusi Mitra. UWG Scholars Day, April 3rd. (**Oral presentation**)

Molecular Characterization of Two High Light-Sensitive Mutants of *Chlamydomonas reinhardtii*, Defective in a Novel Uncharacterized Gene, LSR1. **Joseph Okafor**, Kevin Nguyen, Kenneth Kim, Ja'Von Swint and Mautusi Mitra, UWG Scholars Day, April 3rd. (**Poster presentation**)

Molecular Characterization of Two High Light-Sensitive Mutants of *Chlamydomonas reinhardtii*, Defective in a Novel Uncharacterized Gene, LSR1. **Kenneth Kim**, Kevin Nguyen, Ja'von Swint, Joseph Okafor, Katherine Smith, Tai Truong, and Mautusi Mitra. NCUR, University of Central Oklahoma, Edmond, OK. 4th -7th. (**Oral presentation**)

Molecular Characterization of Two High Light-Sensitive Mutants of *Chlamydomonas reinhardtii*, Defective in a Novel Uncharacterized Gene, LSR1. **Kevin Nguyen, Ja'von Swint**, Kenneth Kim, Joseph Okafor, Katherine Smith, Tai Truong, and Mautusi Mitra. NCUR, University of Central Oklahoma, Edmond, OK. March 4th -7th. (**Poster presentation**)

Molecular Characterization of Two High Light-Sensitive Mutants of *Chlamydomonas reinhardtii*, defective in a novel uncharacterized gene, LSR1 **Kevin Nguyen, Kenneth Kim, Ja'Von Swint** Joseph Okafor, Katherine Smith, Tai Truong, and Mautusi Mitra. SS-ASPB meeting, New Orleans, LA, March 24th - 26th. (**Poster presentation**)

2017: Identification and Molecular Characterization of a High Light-Sensitive *Chlamydomonas reinhardtii* mutant, *lsr1a*. **Ja'von Swint**, Kevin Nguyen, Joel Page III, Katherine Smith, Tai Truong, Kasey Swilley, and Mautusi Mitra. GURC conference at Georgia College and State University, Milledgeville, GA, October, 27th-28th. (**Oral presentation**)

Molecular Characterization of Two High Light-Sensitive Mutants of *Chlamydomonas reinhardtii*, defective in a novel uncharacterized gene, LSR1. **Kevin Nguyen, Ja'von Swint, Kenneth Kim, Katherine Smith, Tai Truong** and Mautusi Mitra. GURC conference at Georgia College and State University, Milledgeville, GA, October, 27th-28th. (**Poster presentation**)

Molecular Characterization of Two High Light-Sensitive Mutants of *Chlamydomonas reinhardtii*, defective in a novel uncharacterized gene, LSR1. **Ja'Von Swint, Kevin Nguyen, Kenneth Kim, Joel Page III, Katherine Smith, Tai Truong**, and Mautusi Mitra. LSAMP meeting, Morehouse College, Atlanta, April 22nd. (**Oral presentation**)

Molecular Characterization of Two High Light-Sensitive Mutants of *Chlamydomonas reinhardtii*, defective in a novel uncharacterized gene, LSR1. **Kevin Nguyen, Kenneth Kim, Joel Page III, Ja'von Swint, Katherine Smith, Tai Truong**, and Mautusi Mitra. LSAMP meeting, Morehouse College, Atlanta, April 22nd. (**Poster presentation**)

Identification of a novel gene LSR1 that plays a role in high light tolerance in the green micro-alga *Chlamydomonas reinhardtii*. **Kevin Nguyen, Ja'von Swint, Joel Page III, Katherine Smith, Tai Truong, Kenneth Kim** and Mautusi Mitra. Southern sectional-American Society of Plant Biologists meeting at Orlando, FL, April 8th-10th. (**Poster presentation**)

Identification of a novel gene that plays a role in high light tolerance in the green micro-alga *Chlamydomonas reinhardtii*. **Kevin Nguyen, Ja'von Swint, Joel Page III, Katherine Smith, Tai Truong, Kasey Swilley**, and Mautusi Mitra. 31st NCUR, University of Memphis, Memphis, TN, April 6th- April 8th. (**Poster presentation**)

Identification and Molecular Characterization of a High Light-Sensitive *Chlamydomonas reinhardtii* mutant, 10E35. **Ja'von Swint, Kevin Nguyen, Joel Page III, Katherine Smith, Tai Truong, Kasey Swilley**, and Mautusi Mitra. NCUR, University of Memphis, Memphis, TN, April 6th- April 8th. (**Oral presentation**)

Molecular Characterization of Two High Light-Sensitive Mutants of *Chlamydomonas reinhardtii*, defective in a novel uncharacterized gene, LSR1. **Kevin Nguyen, Kenneth Kim, Joel Page III, Ja'von Swint, Katherine Smith, Tai Truong**, and Mautusi Mitra. UWG Scholar's Day, April 4th. (**Poster presentation**)

Identification of a novel gene that plays a role in high light tolerance in the green micro-alga *Chlamydomonas reinhardtii*. **Ja'von Swint, Kevin Nguyen, Joel Page III, Katherine Smith, Tai Truong, Kasey Swilley**, and Mautusi Mitra. UWG Scholar's Day, April 4th. (**Oral presentation**)

2016: Identification of a novel gene that plays a role in high light tolerance in the green micro-alga *Chlamydomonas reinhardtii*. **Kevin Nguyen**, Ja'von Swint, Joel Page III, Katherine Smith, Tai Truong, Kasey Swilley, and Mautusi Mitra. GURC conference at Georgia College and State University, Milledgeville, GA, November 4th-5th. (**Poster presentation**)

Identification and Molecular Characterization of a High Light-Sensitive *Chlamydomonas reinhardtii* mutant, 10E35. **Ja'von Swint**, Kevin Nguyen, Joel Page III, Katherine Smith, Tai Truong, Kasey Swilley, and Mautusi Mitra. GURC conference at Georgia College and State University, Milledgeville, GA, November 4th-5th. (**Oral presentation**)

Identification and Molecular Characterization of a High Light-Sensitive *Chlamydomonas reinhardtii* mutant, 10E35. **Kevin Nguyen**, Betkens Senesca, Joel Page III, *Paula Martinez-Feduchi, Kasey Swilley, Katherine Smith, Tai Truong, **Phillip Grovenstein, and Mautusi Mitra. NSF-funded GA-AL-LSAMP Symposium, Clark Atlanta University, Atlanta, GA, April 16th. (**Poster presentation, third place award winner in the poster presentation competition**)

Identification and Molecular Characterization of a High Light-Sensitive *Chlamydomonas reinhardtii* mutant, 10E35. ***Paula Martinez-Feduchi**, **Kevin Nguyen**, **Kasey Swilley**, Katherine Smith, Tai Truong, Betkens Senesca, **Phillip Grovenstein, and Mautusi Mitra. UWG Big Night, April 13th (**Poster presentation**).

Identification and Molecular Characterization of a High Light-Sensitive *Chlamydomonas reinhardtii* mutant, 10E35. **Kasey Swilley**, Asia Poudel, *Paula Martinez-Feduchi, Kevin Nguyen, Betkens Senesca, Katherine Smith, Tai Truong, Tashana Haye, **Phillip Grovenstein, and Mautusi Mitra, NCUR, 2016, University of North Carolina Asheville, April 7th-9th. (**Oral presentation**)

Identification and Molecular Characterization of a High Light-Sensitive *Chlamydomonas reinhardtii* mutant, 10E35. **Kasey Swilley**, *Paula Martinez-Feduchi, Kevin Nguyen, Katherine Smith, Tai Truong, Betkens Senesca, **Phillip Grovenstein, and Mautusi Mitra. UWG COSM Research Day, March 24th. (**Oral presentation, won the second place in the COSM research oral presentation competition**)

Identification and Molecular Characterization of a High Light-Sensitive *Chlamydomonas reinhardtii* mutant, 10E35. ***Paula Martinez-Feduchi**, **Kevin Nguyen**, Kasey Swilley, Katherine Smith, Tai Truong, Betkens Senesca, **Phillip Grovenstein, and Mautusi Mitra. 5th Annual Undergraduate Research Symposium of Natural Sciences and Mathematics at the University of West Alabama, Livingston, 8th March. (**Poster presentation**)

2015: Functional genomic characterization of a light sensitive *Chlamydomonas reinhardtii* mutant defective in photosynthesis. **Tai Truong**, Katherine Smith, Tashana Haye, Kiana Brown, Zachary Nofs, Precious Ajala, Ewan Peterson, Rigoberto Segovia and Mautusi Mitra, NCUR, Eastern Washington University, Cheney, WA, April 16th- April 18th. (**Oral presentation**)

Functional Genomic Characterization of a light sensitive *Chlamydomonas reinhardtii* mutant defective in photosynthesis. **Katherine Smith**, Tai Truong, Tashana Haye, Kiana Brown, Zachary Nofs, Precious Ajala, Ewan Peterson, Rigoberto Segovia and Mautusi

Mitra, NCUR, Eastern Washington University, Cheney, WA, April 16th- April 18th.
(**Oral presentation**)

Molecular Characterization of Two *Chlamydomonas reinhardtii* Light Sensitive-Photosynthetic Mutants. **Kasey Swilley**, Ewan Petersen, Rigoberto Segovia, Katherine Smith, Tai Truong, Tashana Haye, Precious Ajala, Zachary Nofs, **Phillip Grovenstein and Mautusi Mitra. UWG Big Night, UWG, April 14th. (**Poster presentation**)

Characterization of two *Chlamydomonas reinhardtii* mutants which are defective in chlorophyll biosynthesis and photosynthesis. **Katherine Smith**, **Phillip Grovenstein, Darryel Wilson, Kathryn Lankford, *Abigail R. Lennox, Tashana Haye, Kelsey Gaston, Pawel Brzezowski, Bernhard Grimm and Mautusi Mitra. UWG Big Night, April 14th. (**Poster presentation**)

Functional Genomic Characterization of a light sensitive *Chlamydomonas reinhardtii* mutant defective in photosynthesis. **Katherine Smith**, Tai Truong, Tashana Haye, Precious Ajala, Zachary Nofs, Precious Ajala, Ewan Petersen, Rigoberto Segovia, **Phillip Grovenstein, Bernhard Grimm and Mautusi Mitra, GA-AL-LSAMP Symposium, UWG, campus, April 11th. (**Oral presentation, second place award winner in the research presentation competition**)

Molecular Characterization of Two *Chlamydomonas reinhardtii* Light Sensitive-Photosynthetic Mutants. **Ewan Petersen**, **Rigoberto Segovia**, Katherine Smith, Tai Truong, Tashana Haye, Precious Ajala, Zachary Nofs, **Phillip Grovenstein and Mautusi Mitra, NSF-funded GA-AL-LSAMP Symposium, UWG campus, April 11th. (**Poster presentation**)

Molecular Characterization of Two *Chlamydomonas reinhardtii* Light Sensitive-Photosynthetic Mutants. **Katherine Smith**, **Tai Truong**, Tashana Haye, Precious Ajala, Zachary Nofs, Ewan Petersen, Rigoberto Segovia, **Phillip Grovenstein and Mautusi Mitra, American Society of Plant Biologists, southern sectional meeting, Mobile, AL, March 28th-30th. (**Poster presentation**)

Functional Genomic Characterization of a light sensitive *Chlamydomonas reinhardtii* mutant defective in photosynthesis. **Katherine Smith**, Tai Truong, Tashana Haye, Precious Ajala, Zachary Nofs, Ewan Petersen, Rigoberto Segovia, **Phillip Grovenstein, Bernhard Grimm and Mautusi Mitra, COSM Research Day, UWG campus, March 26th. (**Oral presentation**)

Functional genomic characterization of a light sensitive *Chlamydomonas reinhardtii* mutant, *10E35*, that is defective in photosynthesis. **Tai Truong**, Katherine Smith, Tashana Haye, Precious Ajala, Kiana Brown, Ewan Petersen, Zachary Nofs, Rigoberto Segovia, and Mautusi Mitra. COSM Research Day, UWG campus, March 26th. (**Oral presentation; Tai won the First place in the competition and was selected to present research on the Big Night at campus on April 14th**).

2014: Molecular characterization of a chlorophyll deficient *Chlamydomonas reinhardtii* (a green micro-alga) mutant defective in photosynthesis. **Tai Truong**, Tashana C. Haye, Theresa M. Fuller, Bernard Grimm and Mautusi Mitra. 49th National Collegiate Honors Council, Denver, Colorado, November 5th -9th. (**Poster presentation**)

Characterization of two *Chlamydomonas reinhardtii* mutants which are defective in chlorophyll biosynthesis and photosynthesis. **Katherine Smith**, **Phillip Grovenstein, Darryel Wilson, Kathryn Lankford, *Abigail R. Lennox, Tashana Haye, Kelsey Gaston, Pawel Brzezowski, Bernhard Grimm and Mautusi Mitra. 40th Midwest/Southeast Photosynthesis meeting. Marshall, Indiana, October 24th- 26th. (**Poster presentation**)

Functional genomics of two *Chlamydomonas reinhardtii* mutants defective in photosynthesis. **Tashana Haye**, Katherine Smith, Tai Truong, Bernhard Grimm and Mautusi Mitra. 40th Midwest/Southeast Photosynthesis meeting. Marshall, Indiana, October 24th- 26th. (**Poster presentation**)

Identification and molecular characterization of a novel *Chlamydomonas reinhardtii* chlorophyll deficient non-photosynthetic mutant. **Katherine P. Smith**, Tashana C. Haye, Tai L. Truong, Chavar T. Sinclair, Theresa M. Fuller, Michelle A. Kinsey and Mautusi Mitra. 20th Annual SAEOPP McNair/SSS Research Symposium, Atlanta, GA, June, 26th- 29th. (**Oral presentation**)

Molecular characterization of three *Chlamydomonas reinhardtii* mutants defective in photosynthesis. **Tashana Haye**, **Katherine Smith**, **Theresa Fuller**, Tai Truong, **Phillip Grovenstein and Mautusi Mitra. GA-AL LSAMP meeting at the Clark Atlanta University, April. (**Poster presentation**)

Characterization of a *Chlamydomonas reinhardtii* mutant defective in chlorophyll biosynthesis. **Tashana C. Haye**, **Tai L. Truong**, **Theresa M. Fuller**, **Phillip Grovenstein, Kelsey A. Gaston, and Mautusi Mitra. NCUR, Lexington, KY April 3rd- 5th. (**Poster presentation**)

Identification and molecular characterization of a novel *Chlamydomonas reinhardtii* chlorophyll deficient non-photosynthetic mutant. **Katherine P. Smith**, Tashana C. Haye, Tai L. Truong, Chavar T. Sinclair, Theresa M. Fuller, Michelle A. Kinsey and Mautusi Mitra. NCUR, Lexington, KY, April 3rd- 5th (**Oral presentation**)

Identification and Molecular Characterization of a Novel *Chlamydomonas reinhardtii* Mutant that Lacks Detectable Chlorophyll. **Tashana Haye** and Mautusi Mitra. College of Science & Mathematics, Research Day, March. (**First place, \$250 cash award and a certificate**). (**Oral presentation**)

Employing functional genomics to study chlorophyll biosynthesis in *Chlamydomonas reinhardtii*. **Katherine Smith**, Tai Truong, Theresa Fuller and Mautusi Mitra. Big Night (**Poster presentation**).

Identification and Molecular Characterization of a Novel *Chlamydomonas reinhardtii* Mutant that Lacks Detectable Chlorophyll. **Tashana Haye** and Mautusi Mitra. Georgia Undergraduate Research Conference (GURC), Columbus, GA, January 24th- 25th. (**Oral presentation; Tashana won the best research paper presentation award**)

Identification and Molecular Characterization of a novel *Chlamydomonas reinhardtii* Chlorophyll deficient Non-photosynthetic Mutant. **Theresa Fuller** and Mautusi Mitra; Georgia Undergraduate Research Conference (GURC), Columbus, GA, January 24th- 25th. (**Oral presentation**)

2013: Characterization of two *Chlamydomonas reinhardtii* mutants which are defective in chlorophyll biosynthesis and photosynthesis under different irradiance conditions.

Katherine Smith, **Phillip Grovenstein, Darryel Wilson, Kathryn Lankford, Abigail R. Lennox, Tashana Haye, Kelsey Gaston, Pawel Brzezowski, Bernhard Grimm and Mautusi Mitra. STEM Academy, Lithia Springs High School; September 6th. (**Poster presentation**)

Identification and Molecular Characterization of a Novel *Chlamydomonas reinhardtii* Mutant that Lacks Detectable Chlorophyll. ***Cameron Lennox** and Mautusi Mitra; Research Day, UWG, April. (**Oral presentation**)

Employing functional genomics to study chlorophyll biosynthesis in the green micro-alga *Chlamydomonas reinhardtii*. **Tashana C. Haye**, **Phillip B. Grovenstein, Darryel A. Wilson, *Abigail R. Lennox, Alisha A. Contractor, Pawel Brzezowski, Bernhard Grimm and Mautusi Mitra. 27th National Conference on Undergraduate Research (NCUR); University of Wisconsin-La Crosse, Wisconsin USA; April 11th - 13th. (**Oral presentation**)

Characterization of two *Chlamydomonas reinhardtii* mutants which are defective in chlorophyll biosynthesis and photosynthesis under different irradiance conditions. **Kathryn Lankford, Darryel Wilson**, **Phillip Grovenstein, *Abigail R. Lennox, Kelsey Gaston, Pawel Brzezowski, Bernhard Grimm and Mautusi Mitra. American Society of Plant Biologists, southern sectional (SS-ASPB) meeting, Little Rock, Arkansas, April 3rd - 6th. (**Poster presentation; awarded first place in the undergraduate research poster competition**)

2012: Employing functional genomics to study the regulation of tetrapyrrole metabolism in the green microalga *Chlamydomonas reinhardtii*. **Darryel Wilson**, Pawel Brzezowski, **Phillip Grovenstein, Hagen Schlicke, Kathryn Lankford, Kelsey Gaston, Jacqueline Smith, Bernhard Grimm and Mautusi Mitra. 47th National Collegiate Honors Council Annual Conference, Boston, MA, November 14th - November 18th (**Poster presentation**)

Utilization of functional genomics to study regulation of chlorophyll biosynthetic pathways in the unicellular green alga *Chlamydomonas reinhardtii*. **Kathryn Lankford**, Kelsey Gaston, **Phillip Grovenstein, Surangi Perera and Mautusi Mitra. National Conference on Undergraduate Research (NCUR), Weber College, Utah, March 29th - March, 31st. (**Oral presentation**)

Employing functional genomics to identify novel genes that play a role in high light sensitivity. **Kathryn Lankford**, Darryel A. Wilson, ** Phillip B. Grovenstein, Jacqueline M. Smith, *Justin T. Puckett, Daniel V. Foster and Mautusi Mitra. National Conference on Undergraduate Research (NCUR), Weber College, Utah, March 29th - March, 31st. (**Poster presentation**)

Employing functional genomics to identify novel genes that provide photo-protection to plants in high light stress. **Darryel Wilson**, Jacqueline M. Smith, Kathryn Lankford, **Phillip B. Grovenstein and Mautusi Mitra. Southern Sectional American Society of Plant Biologists Meeting, South Carolina, March 3rd - 5th. (**Poster presentation**)

Employing functional genomics to study the regulation of tetrapyrrole metabolism in the green micro-alga *Chlamydomonas reinhardtii*. ****Phillip Grovenstein**, Hagen Schlicke, Bernhard Grimm, Darryel Wilson, Kelsey Gaston, Kathryn Lankford, Jacqueline Smith and Mautusi Mitra. Southern Sectional American Society of Plant Biologists Meeting, Myrtle Beach, South Carolina, March 3rd - 5th. (**Oral presentation**)

2011: Employing functional genomics to study regulation of light independent and light dependent chlorophyll biosynthetic pathways in the model unicellular green alga *Chlamydomonas reinhardtii*. ****Phillip Grovenstein**, Lankford, *Justin Puckett, Kelsey Gaston, Darryel Wilson, Bernhard Grimm and Mautusi Mitra. 37th Annual Midwest/South East Photosynthesis Meeting, Marshall, Indiana, November 11th-13th. **(Poster presentation)**

Employing functional genomics to identify novel genes that provide photo-protection under high light stress in the green microalga *Chlamydomonas reinhardtii*. ***Justin Puckett**, **Phillip Grovenstein, Kathryn Lankford, Jacqueline Smith, Darryel Wilson, Daniel Foster and Mautusi Mitra. 37th Annual Midwest/South East Photosynthesis Meeting, Marshall, Indiana, November 11th-13th. **(Poster presentation)**

Functional Genomics of Eukaryotic Oxygenic Photosynthesis in the Model Unicellular Green Microalga *Chlamydomonas reinhardtii*. **Kathryn Lankford**, **Phillip Grovenstein, Kelsey Gaston, Surangi Perera, *Justin Puckett and Mautusi Mitra. 46th Annual National Collegiate Honors Council Conference, Phoenix, Arizona from October 19th -23rd. **(Poster presentation)**

2011: Functional genomics of eukaryotic oxygenic photosynthesis in the model unicellular green microalga *Chlamydomonas reinhardtii*. **Phillip Grovenstein**, Kelsey Gaston, Surangi Perera, Yakema Sheats, Edna Esume, Confidence Ndukwe, Isaiah Clinton, Rashidat Odewale and Mautusi Mitra. The Southern Sectional meeting of the American Society of Plant Biologists (ASPB) at the Gulf Coast Research Laboratory University of Southern Mississippi Ocean Springs, MS from April 9th - April 11th. **(Poster presentation)**

Employing functional genomics to study eukaryotic oxygenic photosynthesis in the green yeast/ micro-alga *Chlamydomonas reinhardtii*. **Yakema Sheats**, Phillip Grovenstein, Kathryn Lankford and Surangi Perera, Edna Esume, Confidence Ndukwe, Isaiah Clinton, Rashidat Odewale and Mautusi Mitra. The Big Night, Undergraduate Science Student Research Poster Presentation at UWG campus, April. **(Poster presentation)**

Employing functional genomics to study eukaryotic oxygenic photosynthesis in the green yeast/ micro-alga *Chlamydomonas reinhardtii*. **Kelsey Gaston**, Surangi Perera, Phillip Grovenstein, Yakema Sheats, Edna Esume, Confidence Ndukwe, Isaiah Clinton, Rashidat Odewale and Mautusi Mitra. The Research Day, Undergraduate Science Student Research Paper Presentation at UWG campus, 5th April. **(Oral presentation)**

Functional genomics of eukaryotic oxygenic photosynthesis in the model unicellular green micro-alga *Chlamydomonas reinhardtii*. **Kelsey Gaston**, Surangi Perera, Phillip Grovenstein, Yakema Sheats, Edna Esume, Confidence Ndukwe, Isaiah Clinton, Rashidat Odewale and Mautusi Mitra. Eastern Regional Photosynthesis Meeting at Woods Hole, MA, April 1st - 3rd. **(Poster presentation)**

Functional genomics of eukaryotic oxygenic photosynthesis in the model unicellular green microalga *Chlamydomonas reinhardtii*. **Surangi Perera**, Kelsey Gaston, Phillip Grovenstein, *Justin Puckett, Yakema Sheats and Mautusi Mitra. National Conference on Undergraduate Research (NCUR), Ithaca College, New York, March 31st - April 2nd. **(Oral presentation)**

Functional genomics of eukaryotic oxygenic photosynthesis in the model unicellular green microalga *Chlamydomonas reinhardtii*. **Kelsey Gaston**, Surangi Perera, Phillip

Grovenstein, Yakema Sheats, Edna Esumei, Confidence Ndukwe, Isaiah Clinton, Rashidat Odewale and Mautusi Mitra. Georgia Collegiate Honors Council Conference at Clayton State University, GA on February 26th. (**Oral presentation**)

OTHER PROFESSIONAL DEVELOPMENTS

2019: *Chlamydomonas reinhardtii* (a pond scum/green yeast): A “Rock Star” Green Biology Teaching Tool. TenTalks, Innovations in Pedagogy, May 14th, Tanner Health System School of Nursing Building, UWG (**Oral presentation**).

Bioinformatics Course certification: Plant Bioinformatics (Date: 02/28/2019; Instructor: Dr. Nicholas Provart, University of Toronto on Coursera)

<https://www.coursera.org/account/accomplishments/certificate/S6XDGMAKTG28>

Bioinformatics Course certification: Bioinformatic Methods II (Date: 02/03/2019; Instructor: Dr. Nicholas Provart, University of Toronto on Coursera)

<https://www.coursera.org/account/accomplishments/certificate/QRD8X9SBUF5H>

Bioinformatics Course certification: Bioinformatic Methods I (Date: 01/19/2019; Instructor: Dr. Nicholas Provart, University of Toronto on Coursera)

<https://www.coursera.org/account/accomplishments/verify/PZGX6CK4PKDU>

2018: UWG LEAP Summit, UWG Campus Center Ballroom, Carrollton, GA, September 28th.

2016: OU campus 101 Training; earned 2 hours of professional development during basic OU Campus content management system training, UWG, November 3rd.

2010: Participant in the Professional Grant Development Workshop organized by the Grant training Center (Arlington, Virginia) at the Georgia Institute of Technology from October 20th - October 22nd.

GRANTS

2020: Awarded Student Research Assistance Program [SRAP] grant, August. (\$1945)

2019: Awarded SRAP grant, May. (\$1570)

2018: Awarded Georgia-Alabama Louis Stokes Alliances for Minority Participation (GA-AL-LSAMP) grant, September. (\$1000)

Awarded Plant-BLOOME grant by the American Society of Plant Biologists, August. (\$35,919) (**competitive external peer-reviewed grant for curriculum development and educational outreach**)

Awarded Student Research Assistance Program (SRAP) grant, May. (\$1,450)

Awarded College of Science & Mathematics (COSM)-Faculty Research Grant (FRG), April. (\$1,900)

Awarded ORSP-FRG Travel grant, April. (\$2,763)

2017: Awarded Student Educational Enrichment Program (SEEP) research grant, September. (\$1,700)

Awarded GA-AL-LSAMP research grant, August. (\$8000)

- Awarded COSM-FRG grant, May. (\$1,500)
- 2016:** SEEP research grant, September. (\$1,700)
LSAMP research grant, January. (\$4000)
Awarded COSM-FRG grant, July. (\$1,400)
Awarded SRAP grant, May. (\$1475)
Awarded UWG FRG-Office of the Provost and VP for Academic Affairs, April. (\$3,314).
- 2015:** Awarded COSM-FRG grant, August. (\$1,100).
Awarded GA-AL- LSAMP grant, August. (\$6000)
Awarded Uwise grant, August. (\$5000)
Awarded GA-AL-LSAMP summer research grant, May. (\$300)
Awarded SRAP grant, April. (\$1,700)
- 2014:** Awarded Faculty Research Grant, UWG College of Science and Mathematics, October. (\$1,250)
Awarded GA-AL LSAMP grant, September. (\$6000)
Awarded Uwise research grant, September. (\$5000)
Awarded LSAMP summer research grant, May. (\$3000)
Awarded SRAP grant, April. (\$1,800).
GA-AL LSAMP research grant January. (\$6000)
- 2013:** Awarded Uwise grant October. (\$4,800)
Awarded COSM-FRG May. (\$1,250)
Awarded SRAP grant, April. (\$2000)
Awarded the Internal Development grant, UWG office of Research and Sponsored Operations, January.(\$8,207)
- 2012:** Awarded UWG Uwise grant, November. (\$6,700)
Awarded Student Research Assistance Program grant, July. (\$2000)
Awarded COSM-Faculty research grant, April. (\$1500)
Awarded UWG Uwise research grant, January. (\$600)
Awarded COSM Research Incentive grant, UWG College of Science and Mathematics, January. (\$3000)
- 2011:** Awarded SRAP grant, July. (\$2000)
Awarded UWG Learning Resources Committee-Faculty Resource grant, January. (\$2000)
Awarded COSM Research Incentive grant, April. (\$3000)
Awarded Summer Seed Grant for scholarship, UWG Office of Academic Affairs, March. (\$10,778)
- 2010:** Awarded SRAP grant, June. (\$2000).

Awarded Research Grant by the Sponsored Operations for Faculty research (SOFREA) January. (\$2,500)

Awarded College of Arts and Science Faculty research grant, January. (\$500)

FELLOWSHIPS AND SCHOLARSHIPS

2017: American Society of Plant Biologists Summer Undergraduate Research Fellowship (ASPB-SURF) in April (\$5,275) (**competitive external peer-reviewed fellowship application prepared and submitted with my research student**)

2012: Awarded Research Scholarship (Visiting Professor) by Dr. Bernhard Grimm [Humboldt University (Berlin, Germany)], travel grant titled “Retrograde Signaling in Plant” from the Research Unit FOR 80 [funded by the German Research Foundation (DFG)] (2500 euros).

1995: Junior Research Fellowship Award in Life Science by the Council of Scientific and Industrial Research, New Delhi (India).

OTHER GRANTS SUBMITTED

2017: Submitted NSF-RUI-IOS (Integrative Organismal System) preliminary proposal, 18th January: Molecular Characterization of two high light-sensitive *Chlamydomonas reinhardtii* mutants, defective in a novel functionally uncharacterized gene.

2014: Submitted UWG Presidential Assistance grant, 2nd December: Project Name: Molecular Characterization of two *Chlamydomonas reinhardtii* (a green micro-alga) mutants that are defective in photosynthesis.

Submitted NSF-IOS-CAREER, July, 21st: Functional genomic characterization of two *Chlamydomonas reinhardtii* photosynthetic mutants.

Submitted NSF-MRI (as a Co-PI): MRI, January: Acquisition of a Time-Resolved Emission Spectrometer for Interdisciplinary Research and Undergraduate Training.

2013: Submitted NSF-IOS-CAREER, July, 22nd: Functional genomics of eukaryotic oxygenic photosynthesis under different light irradiances in the model green micro-alga *Chlamydomonas reinhardtii*.

Submitted NSF-RUI-IOS preliminary proposal, 16th January: Employing functional genomics to study chlorophyll biosynthesis and photosynthesis in the model green micro-alga *Chlamydomonas reinhardtii*.

2012: Submitted NSF-IOS-Research Opportunity Award (ROA): The role of carbonic anhydrase in photosynthesis in *Arabidopsis*, 21st December.

Submitted NSF-RUI-IOS preliminary proposal, 11th January: Characterization of a heme-deficient *Chlamydomonas reinhardtii* mutant that shows a light intensity dependent chlorophyll deficiency.

OTHER PROFESSIONAL DEVELOPMENT FUNDS/RESEARCH SUPPORT RECEIVED

2020: XIDS 2002 Teaching fund for professional development, August. (\$2,000)

2019: XIDS 2002 Teaching fund for professional development, August. (\$2,250)
2018: Student Research Assistance Program research supply fund, May. (\$604.56)
2016: LSAMP fund for research, March. (\$306)

Year end fund from the Biology Department, March. (\$536.80)

Research fund from the Biology Department for research, April. (\$215)

2015: Academic Affairs fund for research, September. (\$524).

Faculty research support from the UWG-ORSP, May. (\$500)

Summer research support from the Biology Department, May. (\$500)

Research support from the COSM, UWG, May. (\$500)

HONORS/AWARDS (all awards, including student awards can be found at: https://www.facebook.com/pg/uwgmitralab/photos/?tab=album&album_id=1622672871335511)

2019: My former high school research student named an Actinobacteriophage and submitted it in the phage database after my last name: Mitron <https://phagesdb.org/phages/Mitron/>

I was selected competitively selected as the symposium speaker at the Education session of the Plant Biology 2019, San Jose, CA, August 4th.

Leave of absence with pay award for Spring 2019.

2018: Awarded “The Above and Beyond Award” by the UWG Risk Management Environmental Health and Safety.

2014: Awarded College of Science & Mathematics Excellence in Teaching Award for outstanding contributions to student success, April.

2013: Awarded Excellence in Research award by the UWG College of Science and Mathematics, in April.

2012: Awarded the American Society of Plant Biologists (ASPB) Women’s Young Investigator Award February (\$1000).

2006: Travel Award from the Gordon Research Conference, Photosynthesis, July.

2003: Travel Award by the Graduate School and the Department of Biological Sciences of the Louisiana State University, July.

Research award by the Biology Graduate Student Association at Louisiana State University. April 2003.

Travel Award by the Biology Graduate Student Association at Louisiana State University, July.

Travel Award by the Graduate School of the Louisiana State University, March.

Travel Award by the Department of Biological Sciences, Louisiana State University, March.

PROFESSIONAL SERVICES

A. *Ad hoc peer reviewer service for journals* (can be found at Publons (Publons is a commercial website that provides a free service for academics to track, verify, and showcase their peer review and editorial contributions for academic journals.: <https://publons.com/about/home/>)

2019: New Phytologist

2017: Frontiers in Plant Science

2016: Scientific Reports (Nature)

Planta (Springer)

2015: F1000 Research

2014: Planta (Springer)

2012: Agriculture

Journal of Applied Phycology

2007: BBA-Bioenergetics

2006: Nature Protocols

B. *Ad hoc peer reviewer service for academic and educational organizations*

2020: University of West Alabama [UWA] (oral presentation abstract selection for the UWA Research Symposium)

2017: Council on Undergraduate Research (Reviewed student research papers submitted for publication in the Proceedings of the National Conference on Undergraduate Research).

The Center for Undergraduate Research and Creative Activities (CURCA) [reviewed research presentation abstracts for the Georgia Undergraduate Research Conference]

2016: Council on Undergraduate Research (Reviewed student research papers submitted for publication in the Proceedings of the National Conference on Undergraduate Research)

External review of tenure and promotion application dossier of Dr. Nathan Hancock (Assistant professor, University of South Carolina, Department of Biology and Geology, Aiken, SC)

2014: Council on Undergraduate Research (Reviewed student research papers submitted for publication in the Proceedings of the National Conference on Undergraduate Research).

2013: Council on Undergraduate Research (Reviewed student research papers submitted for publication in the Proceedings of the National Conference on Undergraduate Research)

2011: Council on Undergraduate Research (Reviewed student research papers submitted for publication in the Proceedings of the National Conference on Undergraduate Research)

C. *Technical editor services:*

2010-2011: Journal of Plant Sciences (Science Alert journal)

American Journal of Plant Physiology (Science Alert journal)

D. NSF ad hoc reviewer service

2016: NSF-IOS-EDGE PROGRAM, August

E. NSF panelist service

2014: NSF-BIO-IOS panelist, April

F. Curriculum reviewer service (overlaps with community service)

2019: Academic reviewer of Microbiology and Botany K12 curriculum for Georgia Department of Education (GA-DOE), April.

G. Service to professional societies (* denotes overlap with community services)

2019: Elected as the Secretary-Treasurer of the southern section of the American Society of Plant Biologists for 2020-2021, November 1st.

Exhibitor, American Society of Plant Biologists' Exhibitor booth at the Plant Biology 2019 meeting in San Jose, CA; demonstrations to make solar-powered green algae bead bracelets for teaching students, the interplay of photosynthesis and cellular respiration, August *.

Judge and moderator, graduate research oral presentation competition at the SS- American Society of Plant Biologists meeting in Clemson, SC.

2018: Exhibitor, American Society of Plant Biologists' Exhibitor booth at the National Science Teachers Association in Atlanta, GA. Employment of the green micro-alga *Chlamydomonas* to teach Green Biology, March *

2017: Judge, graduate research oral presentation competition at the SS- American Society of Plant Biologists meeting in Orlando, FL, April.

2015: Judge and moderator, graduate research oral presentation competition at the SS- American Society of Plant Biologists meeting in Mobile, AL, March.

2014: Judge, undergraduate student research Poster competition at the SS- American Society of Plant Biologists meeting in Lexington, KY, March.

2011: Chair of the "CO₂ metabolism and Chloroplast biogenesis" session at the Mid-West/South East Photosynthesis meeting at Marshall, Indiana, November.

DEPARTMENT, COLLEGE AND UNIVERSITY SERVICES AT UWG

A. Committee Services

2019-2020: UWG Ad hoc Inter-disciplinary MS program committee

2019: UWG First Year seminar Advisory committee

2018-2020: UWG Chair, COSM Dean's Advisory Committee

2018-2020: UWG Biology Department Personnel Committee

2016-2018: UWG Biology Department Facility and Technology Committee

2017-2021: UWG Academic affairs Student Fees Committee

- 2018-2020:** UWG Biology Department Seminar and Special Events Committee
- 2016-2018:** UWG COSM Technology Committee
- 2016-2018:** UWG Biology Department Technology Committee
- 2015-2017:** UWG Faculty Development Committee
- 2015-2018:** UWG Biology Department Graduate Curriculum Committee
- 2014-2016:** UWG COSM Dean's Advisory Committee
- 2012-2015:** UWG Biology Technology Committee
- 2013-2016:** UWG Biology Seminar and Special Events Committee
- 2011-2014:** UWG Biology Department Undergraduate Curriculum and Instruction Committee
- 2009-2011:** UWG Biology Technology Committee
- 2009-2009:** UWG Multicultural Ball organizing committee (Institutional Diversity)

B. Other Department, College and University Services and Educational outreach (* denotes overlap with community service; Δ denotes overlap with Teaching)

2020: Judge, West Georgia Regional Science & Engineering Fair, UWG. *

2019: Served as a COSM rep for "On the buses" day.

UWG COSM representative for high impact practices (HIP) discussion with Dr. Judith Ramaley (the site evaluator for UWG's TS3 Lumina Foundation Grant which focuses on expanding opportunities for students around experiential learning and other HIPs).

2018: Participated in the UWG Biology Expo, UWG Biology Commons.

2017: Shared NSF science Research Grant Review Process at the Food for Thought Workshop organized by UWG ORSP.

2016: Panelist, Biology Department Career Panel organized by the UWG Marine Biology Club

Importance of Undergraduate Research to students' future careers. September 19th. Guest speaker at the UWG Honors College class for freshman: XIDS 2002- What do you Really Know about The Honors College? UWG Biology Department.

2015: Shared my lab research with 20 Chemistry majors enrolled in CHEM-4910L (Tools and Applications in Chemical Research and Practice) Δ

2014: Judge, West Georgia Regional Science & Engineering Fair, UWG*

2012 - 2019: UWG COSM Preview Day, Biology Department Representative

2012: Started the Biology department seminars with the help of with my former colleague Dr. Barbara Ballentine.

Introduced a group of high school students from local schools in Carrollton (GA) to a 45 minutes University level class in Plant Molecular Biology on the "College for A day". *Δ

2011: Shared research with the high school students and their teachers in the Henry and Camille Dreyfus Foundation Inc. funded "Research Experience via Active Collaboration of High schools (REACH) program" at UWG. *Δ

2010 - present: UWG Biology Department Undergraduate Academic Advisor

2010 - present: UWG and UWG COSM Preview Day, Biology Department Representative

2010 - 2014: Initiatives for procuring a tax-free purchase of ethanol permit, pushing for Web of Science in the campus, re-furbished power generator for the Biology department and purchase of a Bio-Rad Real time PCR machine.

C. Services related to improvement of student life

2011 - present: Editing, proofreading of cover letters, personal statements and CVs of BIOL 3134, BIOL 4985/4134 and BIOL 4503 class and research students who need career guidance, in addition to serving as a referee for professional school and job applications.

Encouraging students to apply for UWG scholarships (University, COSM, LSAMP, Uwise, SEEP etc.) and external scholarships/fellowships (e.g. HHMI LSU-HHMI summer research fellowship), applying for fellowship (e.g. ASPB-SURF fellowship) with students, reviewing students' scholarship applications before official submissions and offering feedback on applications.

Created a scholarship for undergraduate and graduate research students conducting research in the field of Molecular Photosynthesis called "Molecular Photosynthesis Research Award" at UWG. \$500 award per year; can be split between two students.

2010 - present: Providing UWG employment to all my undergraduate research students via SEEP, Uwise, LSAMP and SRAP.

2010 - present: Created an informal mentorship program that bridges the former UWG biology majors who have successful careers in STEM fields, with current UWG STEM majors. This program operates via LinkedIn, Zoom, Skype, my lab's facebook page and emails. Former successful UWG research students who are mentors in this unofficial program can be found at:
https://www.facebook.com/pg/uwgmitralab/photos/?tab=album&album_id=1619254371677361

COMMUNITY SERVICES (* denotes overlap with Teaching; ** denotes overlap with Professional Growth and Development)

2019: Educational outreach (Plant-BLOOME project) involving over 935 K4-K12 students from 9 schools in GA. UWG undergrads accompanied me in these school trips *

Shared hands-on molecular Biology and Plant Physiology based activities with 12 students enrolled in the Ag Science cohort of the Georgia Governor's Honors Program at Berry College, Rome, GA.*

2018: Educating Carrollton community about the green micro-alga Chlamydomonas and its application in Biology teaching at Wolf Science Café in Carrollton, GA**.

2013: Shared lab research with Carrollton High school IB program students *

1999: Tutoring high school children in the Boys' Hope of Baton Rouge (Louisiana), an affiliate of an international program for hurt and at-risk, yet academically capable youth.

MEDIA APPEARANCES (includes media appearance of one research student)

A. Newsletters/news/blogs:

2019: Education and Outreach at the Plant Biology 2019 #ASPBForward Innovation Pavilion. <https://aspb.org/newsletter/archive/2019/SeptOct19.pdf> , page 17

Education Concurrent Symposium at Plant Biology 2019 Showcases Novel Ways to Increase Student Interest and Engagement with Plants. <https://aspb.org/newsletter/archive/2019/SeptOct19.pdf> , page 19

2018: ASPB-SURF awardee research presentation of my research student at the Plant Biology conference in Montreal, Canada. Awardee <https://www.facebook.com/uwgmitralab/videos/2088586154744178/>

Johns Creek college student garners research award for genetic research https://www.gwinnettdaily.com/local/cities/johnscreek/johns-creek-college-student-garners-research-award-for-genetic-research/article_d3f6e152-b388-5b4e-b4bf-70f980a94ecb.html

ASPB Educational Outreach: A Rockstar Booth at NSTA 2018 <https://blog.aspb.org/nsta2018/>

Dr. Mautusi Mitra “BLOOMEs” with \$35,919 grant from the American Society of Plant Biologists. <https://uwgorsp.wordpress.com/2018/08/16/dr-mautusi-mitra-bloomes-with-35919-grant-from-the-american-society-of-plant-biologists/>

2017: Success is in His Genes: The true story of a first-year biology student awarded funding for genetic research <https://www.westga.edu/news/academics-cosm/kenneth-kim.php>

2010: Going Green...Literally, Journal of Young Investigators, <https://www.jyi.org/2010-march/2010/3/7/going-greenliterally>

2008: Green Car Congress: Optimizing Algae for Biofuels by Genetically Truncating Their Chlorophyll arrays. (add link). https://drive.google.com/file/d/1G7IZtjTdekIJQXIXF1gf_0LScjN41RmN/view?usp=sharing

B. Videos:

2016: UWG Research- Discovering and Identifying Novel Genes in Green Algae. <https://youtu.be/zVuahXEOKXA>

2014: Behind the paper: Chlorophyll biosynthesis papers published quickly. <https://www.youtube.com/watch?v=8bylZV06v1U>

SOCIETY MEMBERSHIPS

2020- present: American Society for Microbiology

1998 - present: American Society of Plant Biologists

2018 - present: National Association of Biology Teachers

2007 - 2020: International Society of Photosynthesis Research

2016 - 2018: Sigma Xi, The Scientific Research Society (elected full member)