NSF-CREST Center for Cellular and Biomolecular Machines University of California, Merced 5200 North Lake Road Merced, California 95343 ccbm.ucmerced.edu



# Science and Technology Enrichment Program (STEP) Orientation at UC Merced

Led by the NSF-CREST Center for Cellular and Biomolecular Machines (CCBM) in Collaboration with the STEM Resource Center and UC Merced Faculty, Staff and Students
University of California, Merced
June 11-15, 2018, Student Services Building (SSB) 170

All 2018 STEP applicants and ACS SEED participants invited to attend the June 11-15 orientation.

#### **STEP Program Information**

Orientation + Lab Experience + Workshops + CCBM Open House Poster Session = STEP

## Monday, June 11

Paperwork Session for STEP Parents and Participants, with Nora Cole, 11:00 am-12:30 pm (if not already completed) (STEP only)

Carrie Kouadio: Speed Networking Session, 11:00 am-12:00 pm

Group Lunch, 12:15-1:00 pm, Pizza lunch for STEP and ACS SEED participants and STEP mentors: sponsored by the Center for Career and Professional Advancement at UC Merced

Carrie Kouadio and Nora Cole: NSF-CREST Center for Cellular and Biomolecular Machines (CCBM) and Science and Technology Enrichment Program (STEP) Overview (with CCBM posters), 1:00-1:45 pm

Helia Samani: Previous STEP Participant, 1:45-2:15 pm

Deb Motton: Research Compliance/Integrity, 2:15-4:15 pm

Ayesha Boyce: External Evaluation/Program Evaluation Overview, 4:15-4:30 pm

Armando Quintero: Sierra Nevada Research Institute, 4:30-5:00 pm

#### Tuesday, June 12

Jeff Weekley: WAVE Tour, 8:00-9:00 am (GROUP A, B) (after sign-in-meet at COB2 2<sup>nd</sup> fl. lobby)

Campus Tour, 8:00-9:00 am (GROUP C, D) (meet at SSB 170)

Karen Smith: Lab Safety Fundamentals, 9:00-11:00 am Bill Collier: Fire Safety Training, 11:00 am-1:00 pm

Meghana Medini: Previous STEP Participant/Lunch Seminar, 1:00-1:30 pm

Break, 1:30-2:00 pm

Daniel Wong: Research Ethics, 2:00-3:00 pm (via videoconference)

Library Tour, 3:00-4:00 pm (GROUP A, B)

Jeff Weekley, WAVE Tour, 3:00-4:00 pm (GROUP C, D) (meet at COB2 2<sup>nd</sup> fl. lobby)

Joel Heisler: Research Overview/Keeping a Lab Notebook, 4:15-5:00 pm

#### Wednesday, June 13

Anand Subramaniam Lab: Microscopy Activities (STEP only), 8:00-11:00 am

Break/Lunch, 10:45-11:45 pm

Science-focused TED talks and discussions, 12:00-2:00 pm (History of Science/Nature of Science, CRISPR-Cas9, Sleep/Neuroscience)

Anand Subramaniam Lab: Microscopy Activities (STEP only), 12:00-2:00 pm

David Gravano & Miguel Manansala: Wet-lab Demonstration: Flow Cytometry and Cell Sorting + Stem Cell Instrumentation Foundry Tour (STEP ONLY) 2:00-3:30 pm (3 rotations total/30 min each, 1 rotation is TBD)

Donna Jaramillo-Fellin: Physics/Chemistry Lab, 2:00-3:30 pm (ACS SEED/STEP)

Melissa Goodlad: On Research, 3:45-4:15 pm

Michael Scheibner: Quantum Science & Technology: A Light Matter, 4:15-5:00 pm

#### Thursday, June 14

Chris Alarcon, On Internships in College, 8:00-8:30 am

Mo Kolster: Merced Grassland/Vernal Pools, 8:30-10:45 am (meet at Reserve gate, Veronica Adrover pictures)

Mayya Tokman: Applied Math and Careers in Math, 11:00-11:40 am Angelo Kyrilov: Computer Science and Coding, 11:40 am-12:15 pm Jorge Arroyo: Preparing for College/Lunch Seminar, 12:15-1:00 pm

Donna Jaramillo-Fellin: Physics/Chemistry Lab, 1:00-2:15 pm (1/2 of STEP)

Campus Tour, 1:00-2:00 pm (ACS SEED, Group A/B) Hannah Ewing: UC Merced Highlights, 2:15-2:45 pm

Shawn Newsam: Research Overview/Computer Vision, 2:45-3:30 pm

Lynn Reimer: Research 101, 3:30-4:30 pm Mourad Sadqi: Discussion, 4:30-5:00 pm

## Friday, June 15

Internships & Microscopy Wrap-Up, 8:00-8:30 am

James Brugger: Facilities Management/Central Plant/Solar Arrays, 8:30-9:45 am (meet at SE 2 entrance after sign-in)

Carrie Kouadio and Nora Cole: Discussion and Reflections, 9:45-10:15 am Abraham Lopez: Financing Your College Education and Beyond, 10:15-10:45 am

Teri Campos/John Newton: Setting Yourself Up for Success in College and Overcoming Challenges, 11:00 am-12:00 pm

Petia Gueorguieva: STEM Center/College Resources + College Life/Lunch Seminar, 12:00-12:45 pm

Group Photo, 12:45 pm

Angelo Kyrilov: Q & A, 12:50-1:00 pm

Suhani Nagpal: Computation Hands-on Activity, 1:00-2:30 pm (SSM 154)

David Quint: CCBM Research Overview, 2:45-3:30 pm

Mareshia Donald (Novartis Institutes for BioMedical Research): On Pathways To and Through STEM, 3:45-4:30 pm (via

videoconference)

Carrie Kouadio and Nora Cole: Discussion and Reflections, 4:30-5:00 pm

## \*Tentative

#### Summer Workshops: Open to All Participants and Merced Area Community

Andy LiWang, to be scheduled

Kara McCloskey, August 28, 7:00-8:00 pm (UC Merced campus, room TBD)

Aleksandr Noy, to be scheduled Armando Quintero, to be scheduled

Leroy Westerling, July 31, 7:00-8:00 pm (UC Merced campus, room TBD)

#### **Notes:**

SSB, 170 for sessions all unless noted

STEP + ACS SEED participants unless noted

Participants bring lunches, 2 snacks daily, water bottles, hats, sunscreen, reading material, closed toe shoes, socks, pants, and hair ties (if long hair) each day in book bag (if not on person).

Cell phones should be put away at all times, unless truly required.

We encourage the integration of hands-on activities/demos/samples where possible.

Drop-offs and pick-ups at corner of Le Grand parking lot (get out of car once inside parking lot only) and meet STEP program leaders.

Brenda Ortiz/Jason Alvarez interviews with participants TBD.

# Campus map

SSB: Student Services Building

COB 2: Classroom and Office Building 2

SE 1: Science and Engineering 1 SE 2: Science and Engineering 2

Le Grand Parking Lot

## **CCBM Executive Committee:**

Victor Muñoz, Co-director and Professor of Bioengineering Ajay Gopinathan, Co-director and Professor of Physics Sayantani Ghosh, Associate Professor of Physics Kara McCloskey, Associate Professor of Bioengineering

# **CCBM Project Scientists:**

David Quint Mourad Sadqi

# **External Evaluator:**

Ayesha Boyce, The University of North Carolina at Greensboro

# **Staff/Contact Information:**

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Petia Gueorguieva, STEM Resource Center

Helia Samani, STEP Assistant