



## Chemistry Summer Undergraduate Research Program (CSURP)

The CCHF Chemistry Summer Undergraduate Research Program (CSURP) provides an opportunity for undergraduate students with a strong interest in the chemical sciences to conduct supervised research with a faculty mentor within one of the CCHF 23 partner research labs across the country. CSURP Fellows participate in all phases of the research process, from data collection and analysis to communicating the results in written and oral form. Seminars, workshops, career planning sessions and other professional development opportunities are also available. Fellows are expected to also attend a communicating science research workshop provided by the CCHF.

### No previous research experience is required.

- Engage in innovative, cutting edge research
- Interact with prominent leaders in the field
- Participate in seminars, workshops, career planning sessions and other professional development opportunities
- Receive a competitive stipend
- Receive campus housing or a housing allowance
- Choose from 24 CCHF research laboratories across the country

### Application

- The application and reference forms are available online: <http://www.nsf-cchf.com/opportunities.html>
- Students from underrepresented groups in chemistry are strongly encouraged to apply.

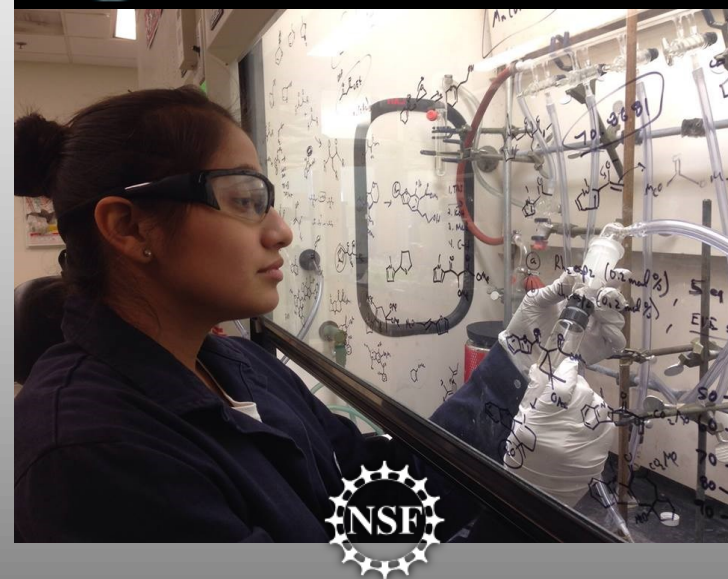
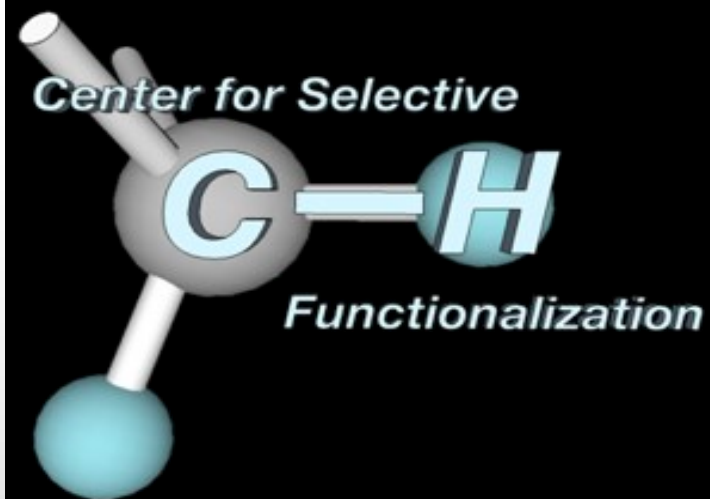


## Meet Our CCHF Research Faculty

John Berry - University of Wisconsin - Madison  
 Donna Blackmond - The Scripps Research Institute  
 Simon Blakey - Emory University  
 Andrew Borovik - UC - Irvine  
 Huw Davies (CCHF Director) - Emory University  
 Justin Du Bois - Stanford University  
 Stefan France - Georgia Institute of Technology  
 Ken Houk - UC - Los Angeles  
 Christopher Jones - Georgia Institute of Technology  
 Jared Lewis - University of Chicago  
 Christine Luscombe - University of Washington - Seattle  
 Cora MacBeth - Emory University  
 Seth Marder - Georgia Institute of Technology  
 John Montgomery - University of Michigan - Ann Arbor  
 Mohammad Movassaghi - MIT  
 Djamaladdin Musaev - Emory University  
 Richmond Sarpong - UC - Berkeley  
 David Sherman - University of Michigan - Ann Arbor  
 Matthew Sigman - University of Utah  
 Erik Sorensen - Princeton University  
 Brian Stoltz - California Institute of Technology  
 Jin-Quan Yu - The Scripps Research Institute  
 Richard Zare - Stanford University

## Contact Information

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 Atlanta, GA 30322  
[cchfresearchchops@nsf-cchf.com](mailto:cchfresearchchops@nsf-cchf.com)  
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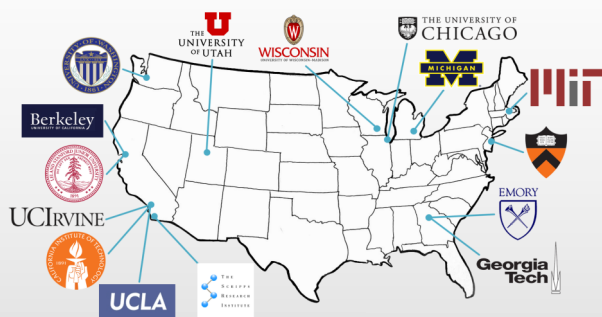


**Chemistry Research Opportunities For Students, Postdoctoral Chemists, and Faculty**

[www.NSF-CCHF.com](http://www.NSF-CCHF.com)

Broadening Participation in Chemistry

# Center for Selective C-H Functionalization



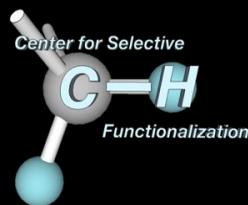
The Center for Selective C-H Functionalization (CCHF) is an NSF supported *Center for Chemical Innovation* that aims to bring about a paradigm shift in the logic and teaching of chemical synthesis, by developing broad synthetic strategies that rely on selective functionalization of traditionally “unactivated” C-H bonds.

Through its network of 15 partnering institutions and dozens of researchers across the country and abroad, the CCHF is breaking new ground and making significant contributions in new chemical innovation and discovery. The Center’s more efficient, cost effective, and cleaner synthetic strategies are poised to have major broader impacts, particularly on sustainable materials development and in providing greater medicinal options to the public.

The CCHF provides a unique opportunity for undergraduate students, graduate students, postdocs, and visiting faculty to engage in cutting edge chemical research, receive advanced training, and publish with world recognized, leading researchers within the CCHF network.

## Our Chemical Innovation Research Areas

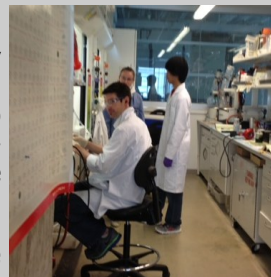
Novel Catalyst Design  
Materials Science Impact  
Mechanistic and Theoretical Studies  
Novel Disconnections Development  
Pharmaceutical Science Impact  
Late-Stage C-H Functionalization



## Fellowship Opportunities

### Graduate and Postdoctoral Fellowships

Over fifty graduate students and postdoctoral chemists currently receive fellowships and assistantships through the CCHF to conduct research in CCHF research laboratories across the country.



Through the Center graduate students and postdocs:

- ◆ Engage in the **cutting edge research** of the CCHF
- ◆ Interact with **prominent leaders in the field**
- ◆ Become adept at using **state-of-the-art** equipment tools, and facilities
- ◆ **Present at professional conferences**
- ◆ Participate in **professional development** workshops and seminars
- ◆ **Publish in scholarly journals**

CCHF graduate students and postdocs also participate in research exchange experiences, conducting research for 2 weeks to up to 3 months in a CCHF laboratory other than their own.

### International Research Fellowships



The CCHF also has supplemental funding from NSF to expand its research collaborative to include international researchers in South Korea, Japan, United Kingdom, and Germany.

Through its Science Across Virtual Institute (SAVI) for C-H Functionalization Initiative, the CCHF provides undergraduate, graduate students, and postdoctoral chemists with the opportunity to participate in fully supported international research exchanges. The exchanges can vary from a few weeks to several months.

For more information: [www.nsf-cchf.com/VICHF](http://www.nsf-cchf.com/VICHF).

[www.NSF-CCHF.com](http://www.NSF-CCHF.com)



## Network for Diversity in Chemical Research

The CCHF is committed to broadening the participation of underrepresented groups in chemistry. The Center believes that diversity in its field will strengthen and add to the intellectual knowledge base and advancement of innovative chemical science research.

The CCHF Network for Diversity in Chemical Research is an extension of the established collaborative CCHF network aimed at attracting and connecting a more diverse cadre of chemistry faculty and students to C-H functionalization research. Network faculty are talented chemists of various backgrounds and represent a broad range of institutions from predominately minority serving institutions to small primarily undergraduate institutions. Network faculty meet regularly and interact with the CCHF in various ways:

- Conduct summer research with up to two of their students in a CCHF lab (CCHF funding available)
- Engage in intellectually stimulating discussions with a community of scientists with common ideas and goals
- Attend virtual research symposia and meetings focused on innovative chemical research
- Experience the benefits of collaborative scientific discussion and brainstorming
- Engage in the integrative and development opportunities afforded through the CCHF and Network

Chemistry faculty with a research focus and or interest in C-H functionalization related research should contact Dr. Monya Ruffin (see back cover).

