



Careers for the Citizen Scientist

2021 ASPIRE Annual Career Symposium
May 6-7, 2021

**Sponsored by the BRET Office of Career Development ASPIRE Program
and the Training Grants in the Biomedical and Biological Sciences**

KEYNOTE KICKOFF

Thursday, May 6
7:00pm



Vincent Racaniello, PhD, (@profvrr) is a Higgins Professor of Microbiology & Immunology at Columbia University Medical Center. He has been studying viruses for over 40 years, starting in 1975, when he entered the PhD program in Biomedical Sciences at Mt. Sinai School of Medicine at the City University of New York. His thesis research, in the laboratory of Dr. Peter Palese, was focused on influenza viruses. In 1979, he joined the laboratory of Dr. David Baltimore at Massachusetts Institute of Technology for postdoctoral work on poliovirus. In 1982, Vincent joined the faculty in the Department of Microbiology at Columbia University College of Physicians & Surgeons in New York City. There he established a laboratory to study viruses, and to train other scientists to become virologists. Over the years his laboratory has studied a variety of viruses including poliovirus, echovirus, enteroviruses 70 and D68, rhinovirus, Zika virus and hepatitis C virus. As principal investigator of his laboratory, he oversees the research that is carried out by Ph.D. students and postdoctoral fellows. He also teaches virology to undergraduate and graduate students, as well as medical, dental, and nursing students. His virology lectures are available online at iTunes University, YouTube, and Coursera.

Vincent entered the world of social media in 2004 with Virology Blog, followed by This Week in Virology. Videocasts of lectures from his undergraduate virology course are on iTunes University and Virology Blog. You can find him on Wikipedia, Twitter, Facebook, and Instagram. His goal is to be Earth's virology professor. In recognition of his contribution to microbiology education, he was awarded the Peter Wildy Prize for Microbiology Education by the Society for General Microbiology, and the American Society for Microbiology Award for Education. His Wildy Lecture provides an overview of how he uses social media for science communication.

Join the conversation on Twitter
#ASPIRECareerSymposium

AGENDA at a Glance • Friday, May 7

9:00-10:00am

ADVOCATING PANEL

Dr. Shobhana Gupta, MD, PhD, Open Innovation and Community Applications Manager, Applied Sciences Program, NASA Earth Science Division

Dr. Denise Zannino Childree, PhD, Science Policy and Communications Strategist, National Science Foundation (NSF)

Dr. Julie E. Fischer, PhD, Senior Technical Advisor for Global Health, CRDF Global

10:30-11:30am

EDUCATING PANEL

Dr. Emily Dilger, PhD, Chief Education Officer, Ignited

Dr. Johnna Frierson, PhD, Assistant Dean of Graduate and Postdoctoral Diversity and Inclusion, Duke University School of Medicine

Dr. Whitney Holden, PhD, Life Science Specialist, Arkansas School for Mathematics, Sciences, and the Arts

12:00-1:00pm

Networking Power Hour

1:30-2:30pm

MANAGING PANEL

Dr. Zusi Andrews, PhD, Biologist and Medical Writer, NIH/NCI

Dr. Trenis Palmer, PhD, Senior Clinical Research Associate, Inhibrx, Inc

Dr. Sara Yin, PhD, Senior Director of Access Marketing, Epizyme

3:00-4:00pm

WRITING PANEL

Dr. Christopher Arnette, PhD, Developmental Editor for Current Protocols, Wiley

Dr. Siri Carpenter, PhD, Editor-in-Chief, The Open Notebook

Dr. Sudipta Chakraborty, PhD, Clinical Trial Transparency Manager, PRA Health Sciences

Join the conversation on Twitter
#ASPIRECareerSymposium

Advocating Panel

9:00am



Dr. Shobhana Gupta, MD, PhD

Open Innovation & Community Applications Manager, Applied Sciences Program, NASA Earth Science Division

Shobhana Gupta, MD/PhD, is a physician scientist and currently serves as the Open Innovation and Community Applications Manager with Earth Science Division's Applied Sciences Program at NASA Headquarters. Dr. Gupta manages crowdsourcing activities including prize competitions to invite talent and experiences outside of the NASA community for the discovery and development of applications of Earth observations. She also supports the advancement and scaling of new ideas, products, and services developed with the Applied Sciences Program, as well as community-based projects to address societal challenges through collaborations between community, policy, and subject-matter experts in Earth science.

Dr. Gupta has been with NASA for 3 years. Prior to her current role, Dr. Gupta served as the American Association for the Advancement of Science's (AAAS) Science and Technology Policy fellow in the Health and Air Quality Applied Sciences Program from 2015 to 2017, where she assisted in program leadership with management of funded projects and activities for the Group on Earth Observations' Health Community of Practice.

During her fellowship, Dr. Gupta also served as the Earth Category

lead in the 2016 hackathon event for NASA's International Space Apps Challenge Program — the world's largest hackathon. She then served as the program manager for the entire Space Apps Challenge Program for the 2017 hackathon event. Dr. Gupta's work with Space Apps was recognized in 2016 with the NASA Team Excellence Award, and in 2017 with both the NASA Team Excellence Award and the NASA Blue Marble Award. Currently, Shobhana continues to serve as a member of the Space Apps Challenge Leadership Team to engage the brightest and most creative minds around the world to help solve problems in space and on Earth.

Dr. Gupta completed her medical and graduate training at Vanderbilt University School of Medicine in the Department of Microbiology and Immunology, where she used nuclear magnetic resonance spectroscopy to investigate the structure and function of ArsR, a transcription factor that regulates gene expression in *Helicobacter pylori*. Dr. Gupta trained as a postdoctoral fellow at Yale University School of Medicine in the Department of Neurology, where she used confocal and in vivo two-photon microscopy to understand mechanisms regulating local cerebral blood flow coupling to neuronal activity and their disruption in neurovascular pathologies.

TIMELINE

Undergraduate
Research with
Dr. Larry Marnett

MD/PhD,
VUMC with
Dr. Tim Cover,
Dr. Andrzej
Krezel

Postdoctoral
Fellowship,
Yale University
School of
Medicine

Science Policy
Activities,
Yale Science
Diplomats

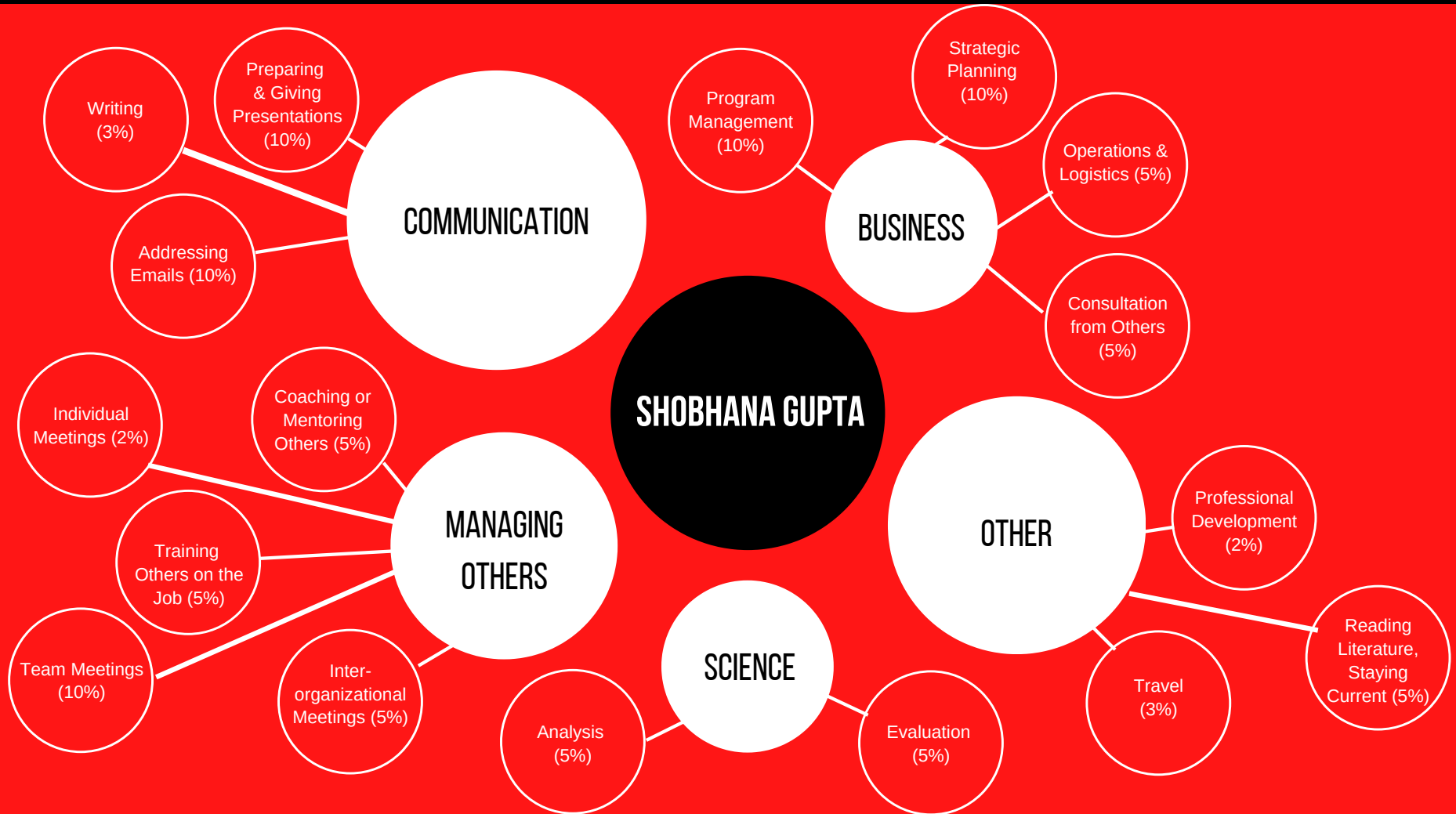
AAAS Science
& Technology
Policy
Fellowship,
NASA HQ

Open Innovation
and Community
Applications
Manager, NASA



Dr. Shobhana Gupta, MD, PhD

Open Innovation & Community Applications Manager, Applied Sciences Program, NASA Earth Science Division





Denise Zannino Childree, PhD

Science Policy and Communications Strategist, National Science Foundation (NSF)

Dr. Denise Zannino Childree, PhD, is a Science Policy and Communications Strategist at the National Science Foundation. In this capacity, she is responsible for internal communications and strategic visioning, special projects for the Office of the Director, project management for special events such as press conferences and symposiums, and general science outreach and communications projects. Prior to this role, Dr. Childree was an AAAS Science & Technology Policy Fellow in the same office. Dr. Childree earned her

PhD in neuroscience from Vanderbilt University, and a BS in biology and psychology from James Madison University. She is passionate about utilizing her scientific background and experience in biomedical research to communicate science to a varied range of audiences including the public, media, and other scientists, and to promote scientific programs, outreach, and awareness. In her spare time Denise enjoys hiking, traveling, cooking, and photography with her husband and son.

CAREER HIGHLIGHTS

High School,
Math & Science
Specialty Center

Undergrad,
James Madison
University

PhD,
Vanderbilt
University

Postdoc,
UMass Medical
School

AAAS Science
& Technology
Fellowship
Program

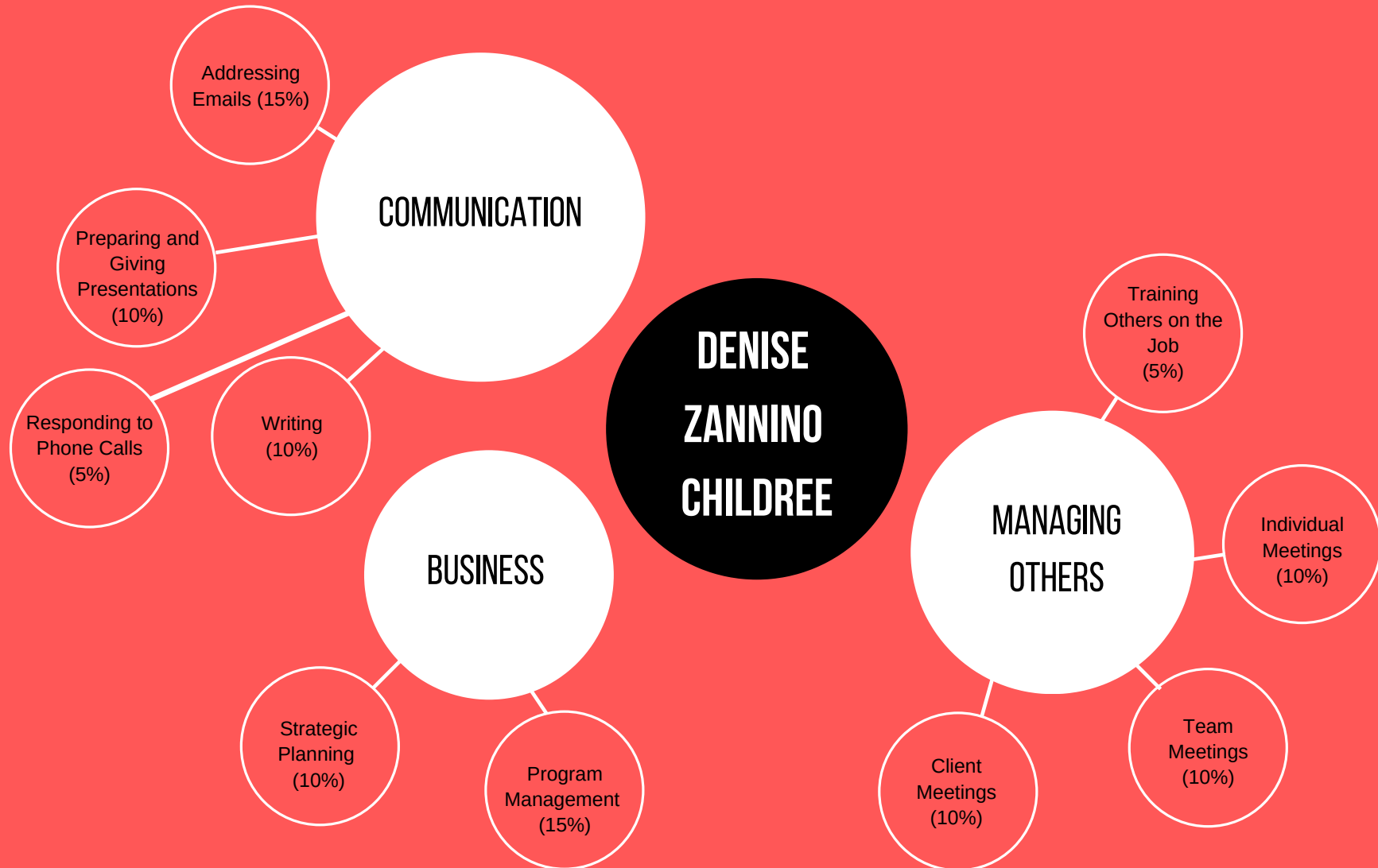
Federal Temp
Position, NSF

Permanent
Position, NSF



Denise Zannino Childree, PhD

Science Policy and Communications Strategist, National Science Foundation (NSF)





Dr. Julie E. Fischer, PhD

Senior Technical Advisor for Global Health, CRDF Global

Dr. Julie E. Fischer is the Senior Technical Advisor for Global Health at CRDF Global, an independent non-profit organization that works to empower people and programs to prevent, detect, investigate, and mitigate disease threats worldwide. Prior to joining CRDF Global, Dr. Fischer served as the Director of the Elizabeth R. Griffin Program and was an Associate Research Professor in the Department of Microbiology and Immunology at Georgetown University, where she led a multidisciplinary team to promote evidence-based biosafety and biosecurity practices, and to help partner nations strengthen their capacities to detect and respond to disease threats. Dr. Fischer previously co-directed multidisciplinary teams in the Milken Institute

School of Public Health at the George Washington University and at the Stimson Center, and served as a microbiologist with a Thai-U.S. collaboration aimed at strengthening Thailand's capacities to identify and control emerging infections of regional and global significance.

Dr. Fischer is a former Council on Foreign Relations International Affairs fellow and AAAS Congressional Science & Technology Fellow. Dr. Fischer completed her postdoctoral training at the University of Washington and Seattle Biomedical Research Institute after receiving a Ph.D. in Microbiology and Immunology from Vanderbilt University.

CAREER HIGHLIGHTS

Vanderbilt
Graduate
School

Postdoc,
UW/Seattle
Biomedical
Research Institute

AAAS
Congressional
Science &
Technology
Fellowship

Council on
Foreign Relations
International
Affairs Fellowship

Role at
Thai-US CDC
Collaboration

Senior Fellow at
Stimson Center
policy think tank

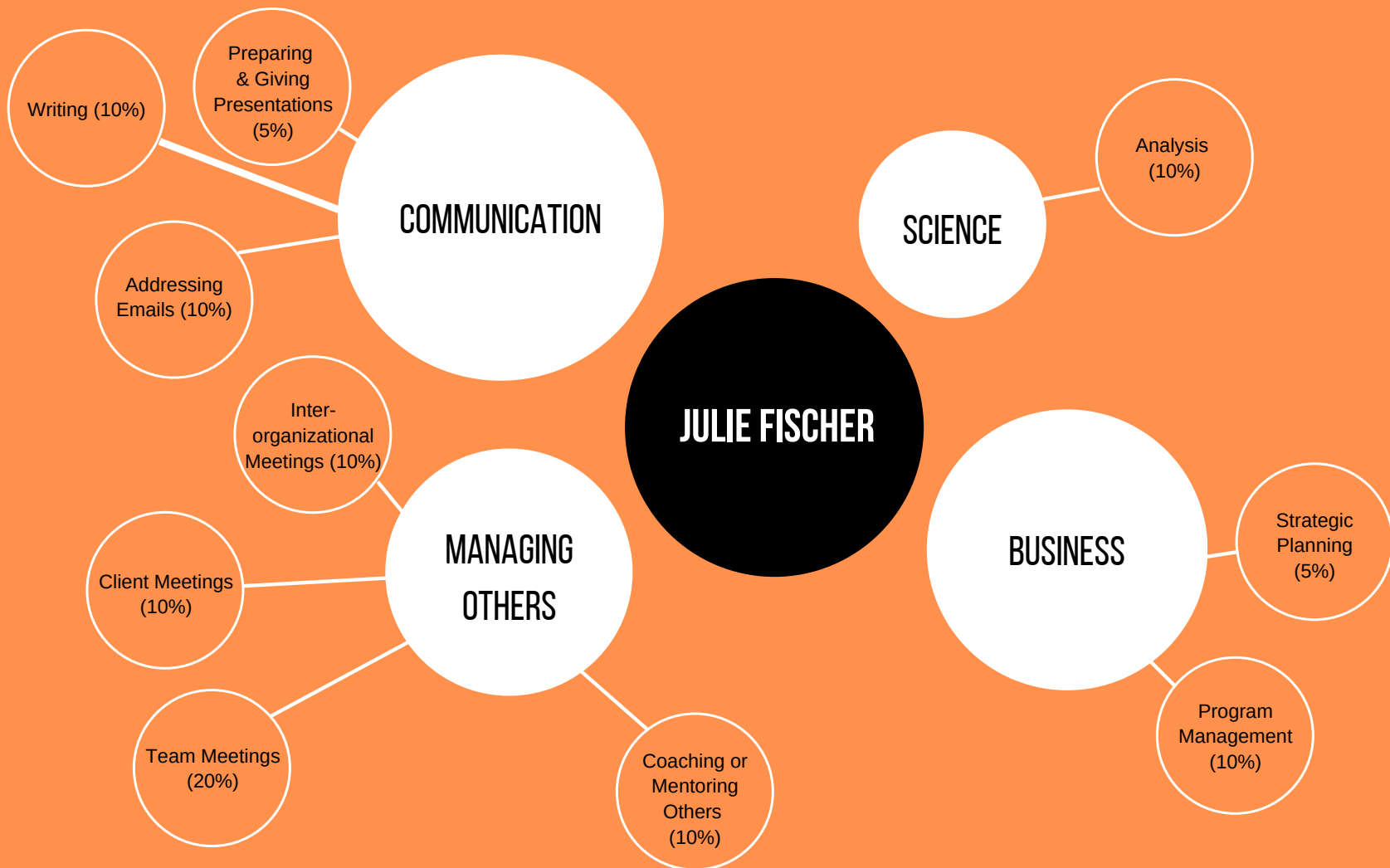
Program
Director, GWU
& Georgetown
Universities

Sr Technical
Advisor at
CRDF Global



Dr. Julie E. Fischer, PhD

Senior Technical Advisor for Global Health, CRDF Global



Educating Panel

10:30am



Dr. Emily Dilger, PhD

Chief Education Officer, Ignited

Dr. Emily Dilger is the Chief Education Officer of Ignited, a non-profit focused on teacher professional development. Teachers are given paid STEM workplace experiences in industry and research, fully immersed in workplace culture and real-world application of skills, and coached to incorporate the learning into their classrooms. Previously, Dr. Dilger worked as the Bay Area Ecosystem Lead for the California Academy of Sciences, designing and leading networks and fostering and maintaining relationships with 50+ Bay Area organizations.

During her time in the DC area, she served as the Public Outreach Manager for the American Society for Microbiology and the Society for Neuroscience, where she managed the public education website BrainFacts.org and coached scientists to communicate their science in creative ways. Dr. Dilger received her PhD in Neuroscience from Virginia Commonwealth University School of Medicine and her BS in biology from Mary Washington College.

CAREER HIGHLIGHTS

Volunteering during Grad School

3-month temp position, Comms at Society for Neuroscience

Permanent Job, SfN in Public Outreach (Program Management)

Job Growth, SfN, grant & committee management, strategic planning, etc

Job, American Society for Microbiology building new programs

Move to California, job at science museum, coalition building

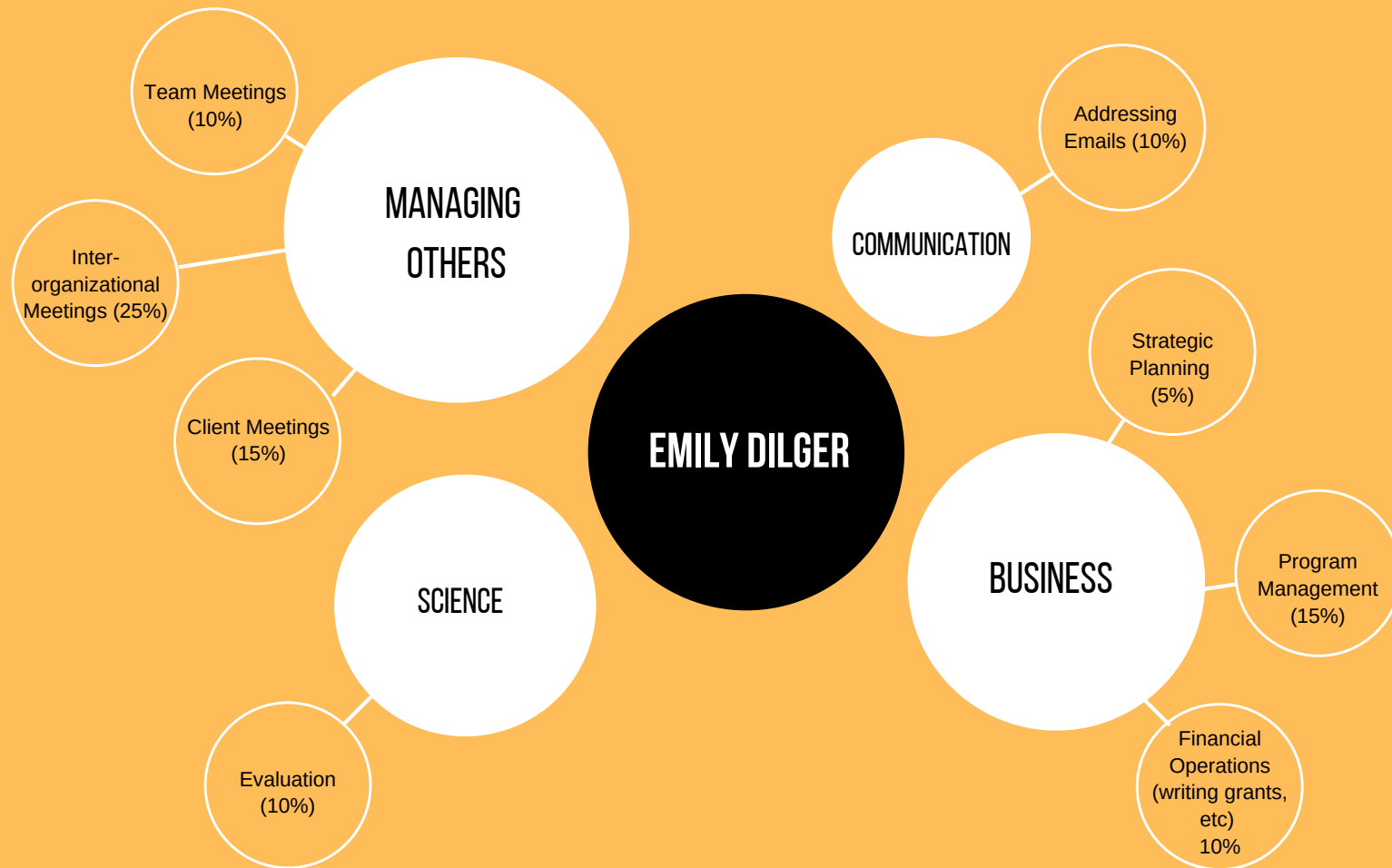
Being picky & knowing what I have to offer & waiting for the right opportunity

Chief Education Officer at Ignited



Dr. Emily Dilger, PhD

Chief Education Officer, Ignited





Dr. Johnna Frierson, PhD

Assistant Dean of Graduate and Postdoctoral Diversity and Inclusion, Duke University School of Medicine

Dr. Johnna Frierson, PhD, serves as the Assistant Dean of Graduate and Postdoctoral Diversity and Inclusion at the Duke University School of Medicine. She directs the IDEALS office (Inclusion, Diversity, Equity, Advancement, and Leadership in the Sciences) which expands and enhances the School of Medicine's diversity and inclusion initiatives for graduate students and postdoctoral appointees working in biomedical research. She and her team partner with basic science departmental faculty and leaders to cultivate a strong and supportive community for underrepresented PhD students and postdoctoral appointees, developing and implementing pertinent professional development activities, as well as academic and wellness programs in collaboration with the School's Office of Diversity and Inclusion.

Dr. Frierson was the founding director of the Office of Diversity and Inclusion at the Pratt School of Engineering, where she served for almost four years. In her role at Pratt, Dr. Frierson provided leadership in developing and implementing practices to enhance recruitment and retention of underrepresented groups at the student, faculty and staff levels, and to foster greater inclusion of diverse groups and viewpoints in the academic community. She obtained her undergraduate degree in biology at Furman University in Greenville, SC, and received a PhD in virology in the Department of Microbiology and Immunology at Vanderbilt University. She completed her postdoctoral training at UNC-Chapel Hill School of Medicine.

CAREER HIGHLIGHTS

Vanderbilt
Postbaccalaureate
Program

Vanderbilt
PhD Graduate
Program

Leadership
positions in
campus orgs
during Grad
School

STEM
Director
Postdoctoral
Fellowship at
UNC Chapel
Hill

Program
Coordinator
Role, NC
State College
of Veterinary
Medicine

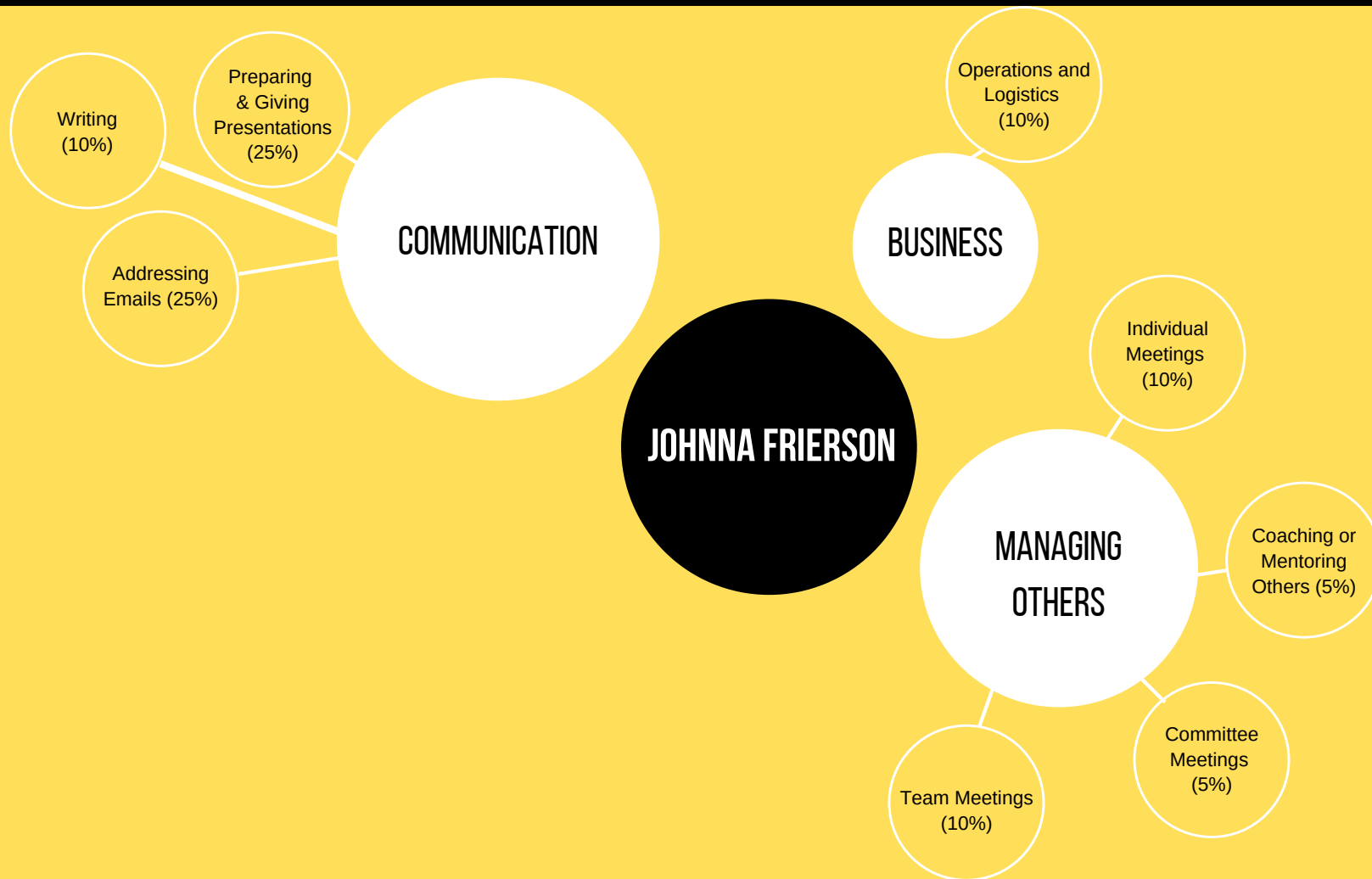
Director
Position,
Duke University
School of
Engineering

Assistant Dean,
Diversity &
Inclusion, Duke
University School
of Medicine



Dr. Johnna Frierson, PhD

Assistant Dean of Graduate and Postdoctoral Diversity and Inclusion,
Duke University School of Medicine





Dr. Whitney Holden, PhD

Life Science Specialist, Arkansas School for Mathematics, Sciences, and the Arts

Dr. Whitney Holden earned her PhD in Microbiology and Immunology from Vanderbilt University, where she also held a Graduate Research Fellowship from the National Science Foundation. At the Arkansas School for Mathematics, Sciences, and the Arts (ASMSA), she teaches biology courses while mentoring students in independent research. Dr. Holden is known for her use of innovative practices and technologies in the classroom, and was recently awarded the inaugural Innovative Teacher Award from the National Consortium of Secondary STEM Schools. Under her mentorship, four of Dr. Holden's research students have been invited to compete at the International Science and Engineering Fair since 2017 and many more have earned recognition at regional and state science fairs. In serving as co-director of the Advanced Biology Plus program, Holden provides training, curriculum, and equipment to approximately 40 AP Biology teachers across the state of Arkansas. Participation in

this program has resulted in significant increases in test scores for participating schools and more college credit earned for participating students. As co-director of the Arkansas Summer Research Institute, Dr. Holden has built a training program that teaches technical skills like electrophoresis and programming languages, while also focusing on essential professional skills like entrepreneurship and networking. The strength of this program has led to it being used as a model for the implementation of similar programs in other states. Committed to freely accessible educational materials, Dr. Holden also runs a YouTube channel, Biology Professor, with 4 million views and almost 50,000 subscribers, and partners with the Multimedia Educational Resource for Learning and Online Teaching (MERLOT), a repository for open educational resources curated by expert educators from various disciplines.

CAREER HIGHLIGHTS

Bodenhamer
Fellow & Goldwater
Scholar, UA
Fayetteville

Undergrad
Research at
UAMS & UA
Fayetteville

NSF Grad
Research Fellow,
Vanderbilt
University

Certificate in
College Teaching,
Vanderbilt Center
for Teaching

Founded
YouTube
Channel:
Biology Professor

STEM Pathways
Biology Teacher
at ASMSA

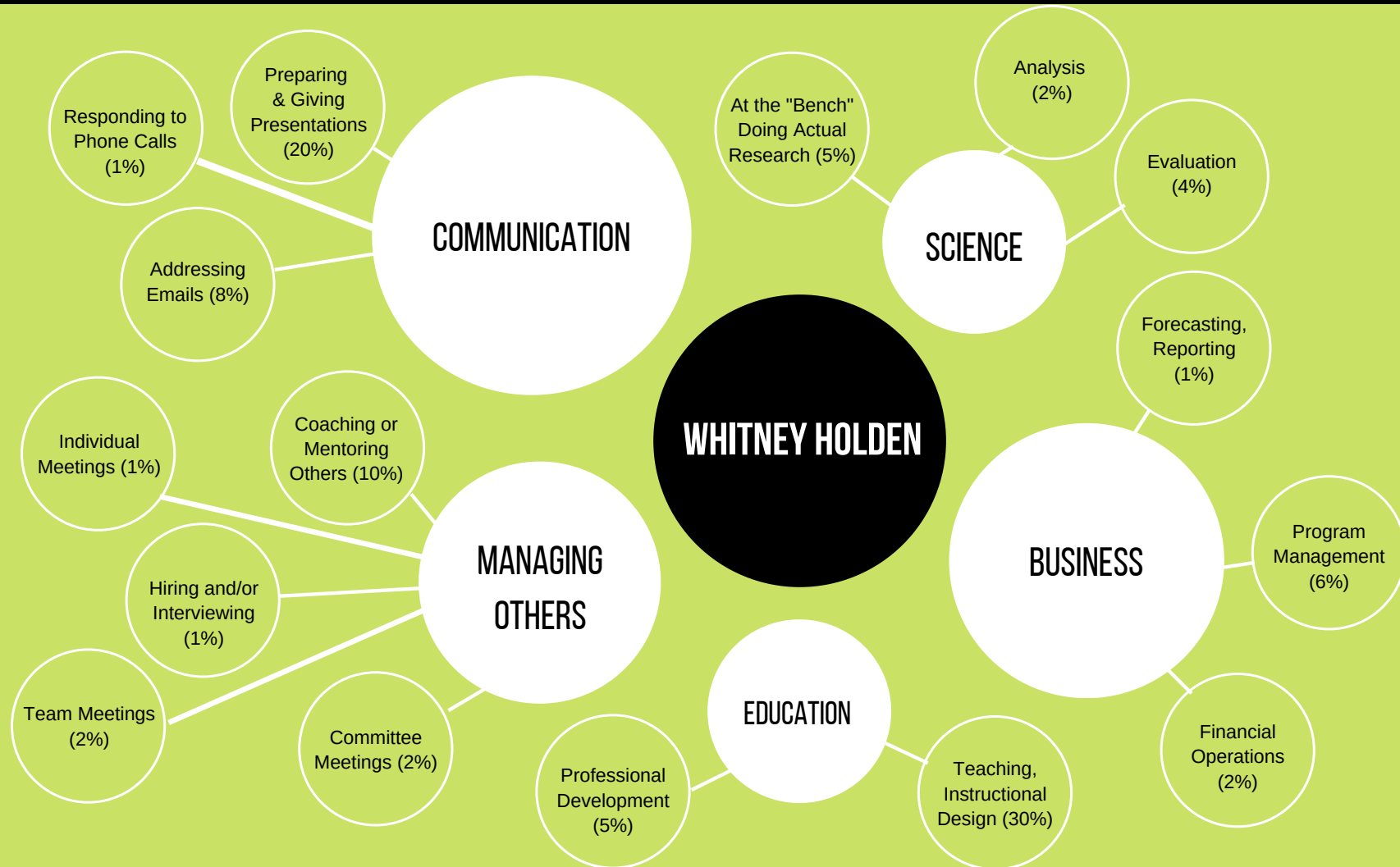
Co-Director,
Arkansas
Summer Research
Institute

Co-Director,
Advanced Biology
Plus Outreach
Initiative



Dr. Whitney Holden, PhD

Life Science Specialist, Arkansas School for Mathematics, Sciences, and the Arts



Managing Panel

1:30pm



Dr. Omozusi Andrews, PhD

Biologist and Medical Writer, NIH/NCI

Dr. Zusi Andrews, PhD, is a trained biologist and medical writer for the NIH (NCI). As a medical writer and science communicator, she is responsible for managing clinical trial protocols and writing scientific manuscripts about cancer research. Prior to the NIH, she served as a lead scientific reviewer with the FDA. Dr. Andrews reviewed pre-market medical device submissions and performed post-market actions including recalls, premarket approval (PMA) annual reports,

and 30-day notices to protect consumers. Prior to her regulatory position Dr. Andrews served as a research fellow for the FDA and as a postdoctoral fellow in the NIH (NIAID) Intramural Research Program performing public health-related research. Dr. Andrews received her PhD in Biological Sciences at Vanderbilt University and her B.S. in biology from the University of Maryland Eastern Shore.

CAREER HIGHLIGHTS

Interest in science, STEM high school

Mentorship and hands-on research in college

Rigorous PhD Program, Vanderbilt University

Pivoting from cancer lab to basic biology lab

Networking during NIH Postdoc

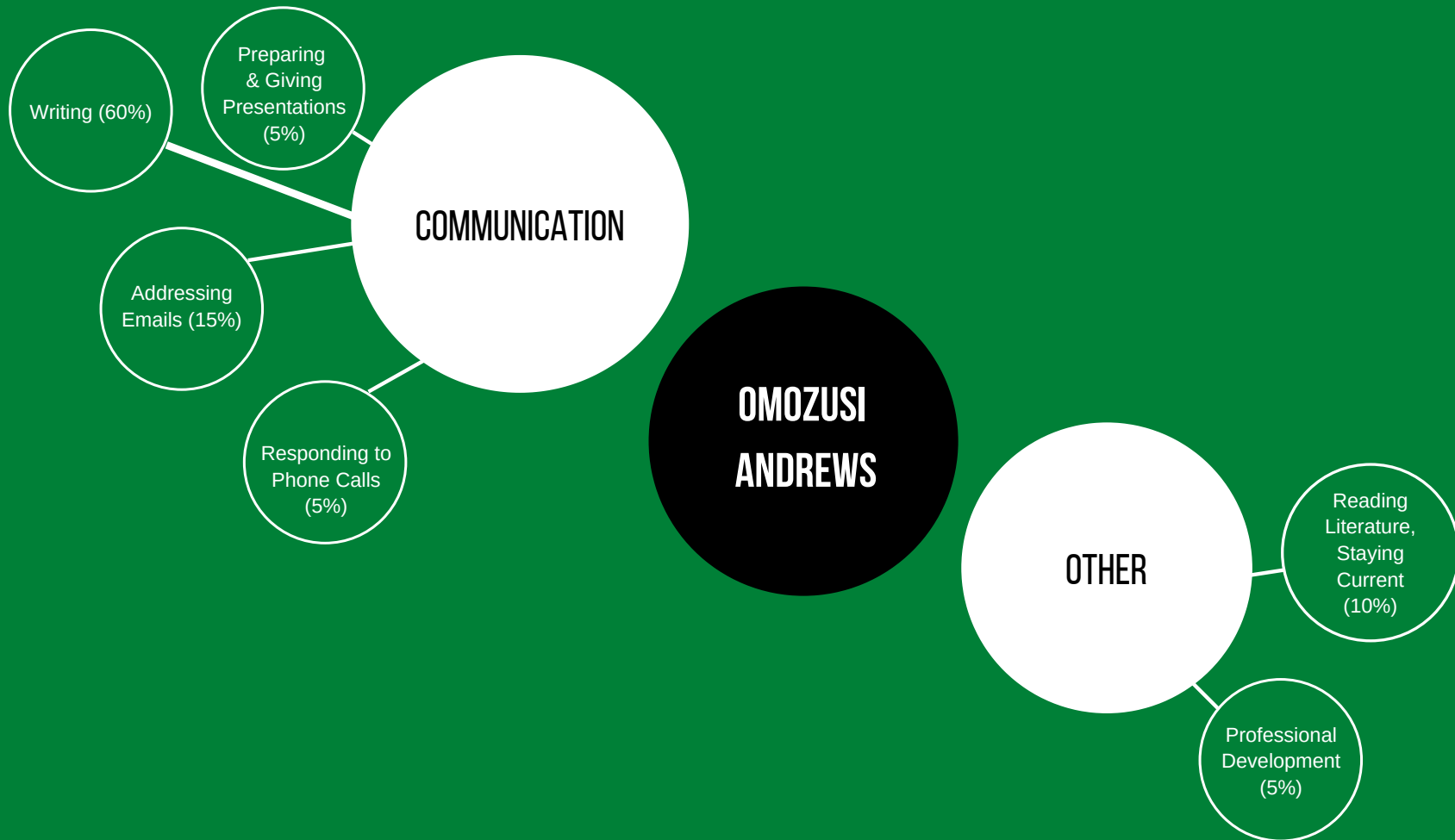
Expanding Leadership/Communication Skills in FDA Fellowship

Experiential Growth as a FDA Lead Reviewer

Expanding Clinical Repertoire as NCI Med Writer



Dr. Omozusi Andrews, PhD
Biologist and Medical Writer, NIH/NCI





Dr. Trenis Palmer, PhD

Senior Clinical Research Associate, Inhibrx, Inc

Dr. Trenis Palmer is the Senior Clinical Research Associate for Inhibrx, Inc. Dr. Palmer is a biomedical sciences PhD and clinical research professional possessing extensive non-clinical and clinical research expertise, including non-clinical experience in tumor cell invasion and metastasis and clinical research experience in Phase I-III clinical trials with a thorough understanding of International Conference on Harmonization Good Clinical Practice (ICH-GCP)

guidelines. Dr. Palmer has a proven track record of meeting timelines and driving study progress as his past experience includes clinical research roles with IQVIA and Caritas Clinical Consulting. Dr. Palmer received his PhD in Pathology at Vanderbilt University with Dr. Andries Zijlstra and completed his postdoctoral fellowship at University of California San Diego with Dr. Jing Yang.

CAREER HIGHLIGHTS

PhD,
Vanderbilt
University

Postdoc, The
University of
California San
Diego

Clinical Trials
Intern, Caritas
Clinical
Consulting, LLC

Clinical Research
Associate I,
Caritas Clinical
Consulting, LLC

Senior Clinical
Research
Associate II,
IQVIA

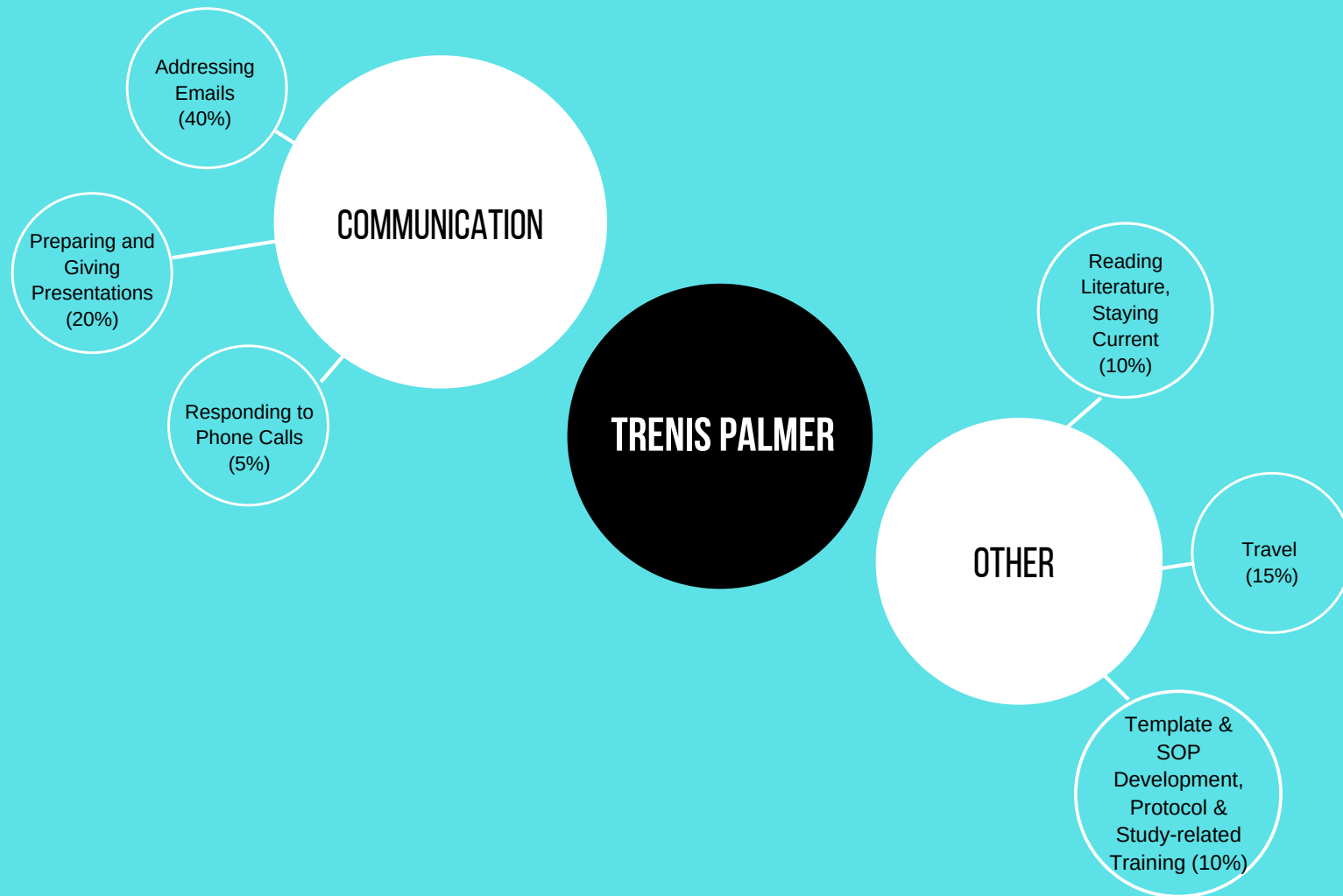
Senior Clinical
Research
Associate III,
IQVIA

Senior Clinical
Research
Associate,
INHIBRX



Dr. Trenis Palmer, PhD

Senior Clinical Research Associate, Inhibrx, Inc





Dr. Sara Yin, PhD

Senior Director of Access Marketing, Epizyme

Dr. Sara Yin, PhD, is the Senior Director of Access Marketing at Epizyme. She currently leads the TAZVERIK launch strategy execution as well as a few high impact initiatives. Prior to her time at Epizyme, she spent over four years with EMD Serono as the product launch lead for MAVENCLAD, responsible for development and execution of launch access strategy in both US and ex-US markets.

She supported the assessment of several business development opportunities in oncology and immunology. Dr. Yin received her PhD in Pharmacology from Vanderbilt University and her MBA from MIT Sloan School of Management.

CAREER HIGHLIGHTS

Network and know your options and alumni.

Do the best job you can in most important projects.

Make friends with coworkers and leave a good reputation.

Help others to succeed.

Don't stay comfortable for too long.

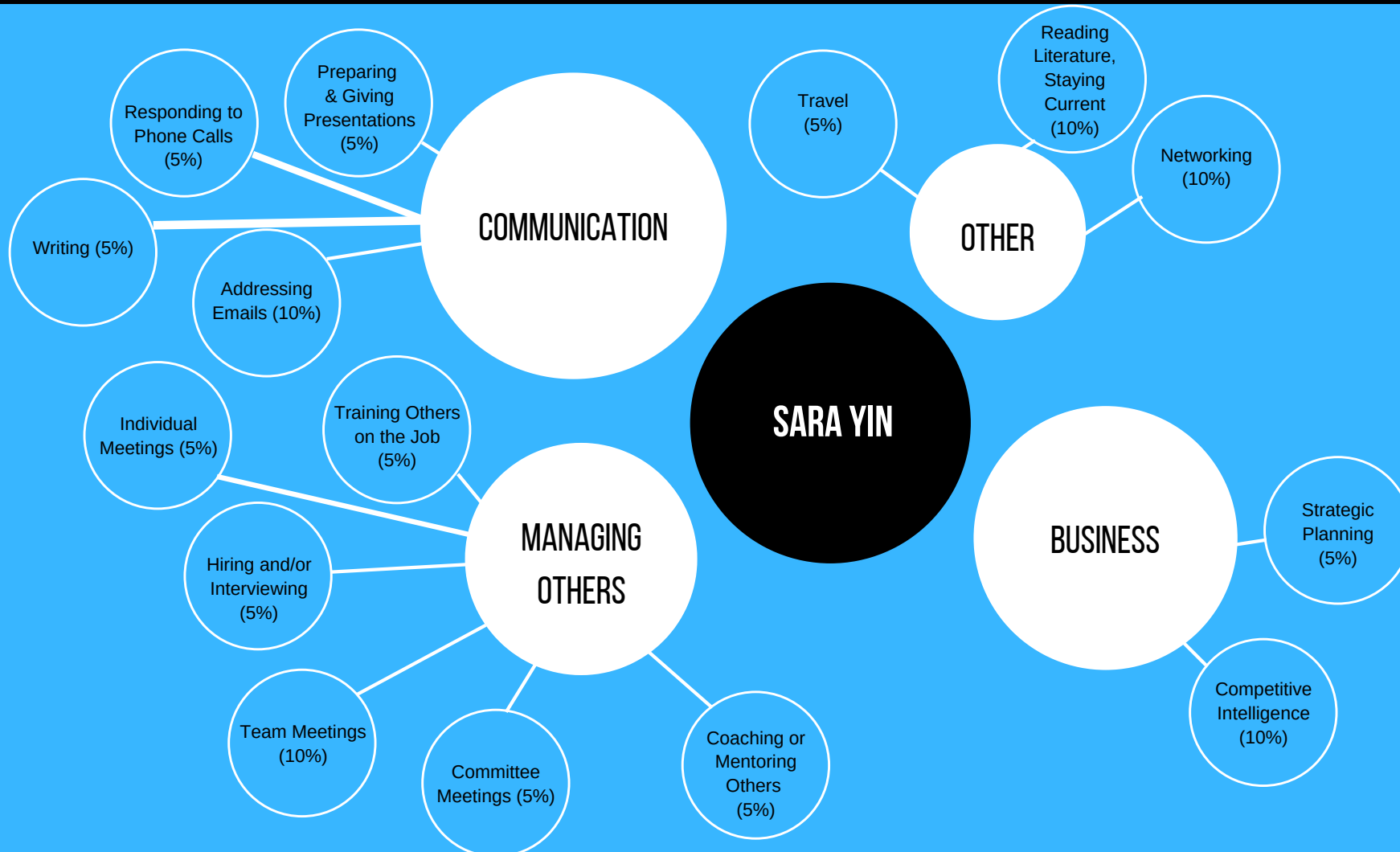
Take risks and be comfortable with new and unknown.

Chase the right thing, not what everyone chases.



Dr. Sara Yin, PhD

Senior Director of Access Marketing, Epizyme



Writing Panel

3:00pm



Dr. Christopher Arnette, PhD

Developmental Editor for Current Protocols, Wiley

Dr. Christopher Arnette received his PhD in Cell and Developmental Biology from Vanderbilt University with Dr. Irina Kaverina. His research focused on elucidating the molecular pathways for the regulation of microtubule dynamics and the effects that this has on organelle architecture, as well as pathways mediating cytoskeletal crosstalk in trafficking mechanisms. Following graduate school, Dr. Arnette was a postdoctoral fellow at Northwestern's Feinberg School of Medicine where he examined the role of desmosomal cadherin, Desmoglein 1, in modulating the microenvironment through regulation of cytokine production and how this impacts neighboring

cells and creates a permissive environment for cancer development.

In his current position as Developmental Editor for Current Protocols, he manages four titles: *Bioinformatics*, *Cytometry*, *Plant Biology*, and *Human Genetics*. Dr. Arnette provides the initial edit and revision of scientific content to submitted manuscripts, manage the submission process and author engagement, designs and produces promotional materials for the journals, and promotes the Wiley brand at subject-area specific conferences and meetings.

CAREER HIGHLIGHTS

Strong
Undergraduate
Education

Solid
Undergraduate
Research
Experience

Vanderbilt
Graduate
School

Postdoc at
Northwestern

F32 Fellowship

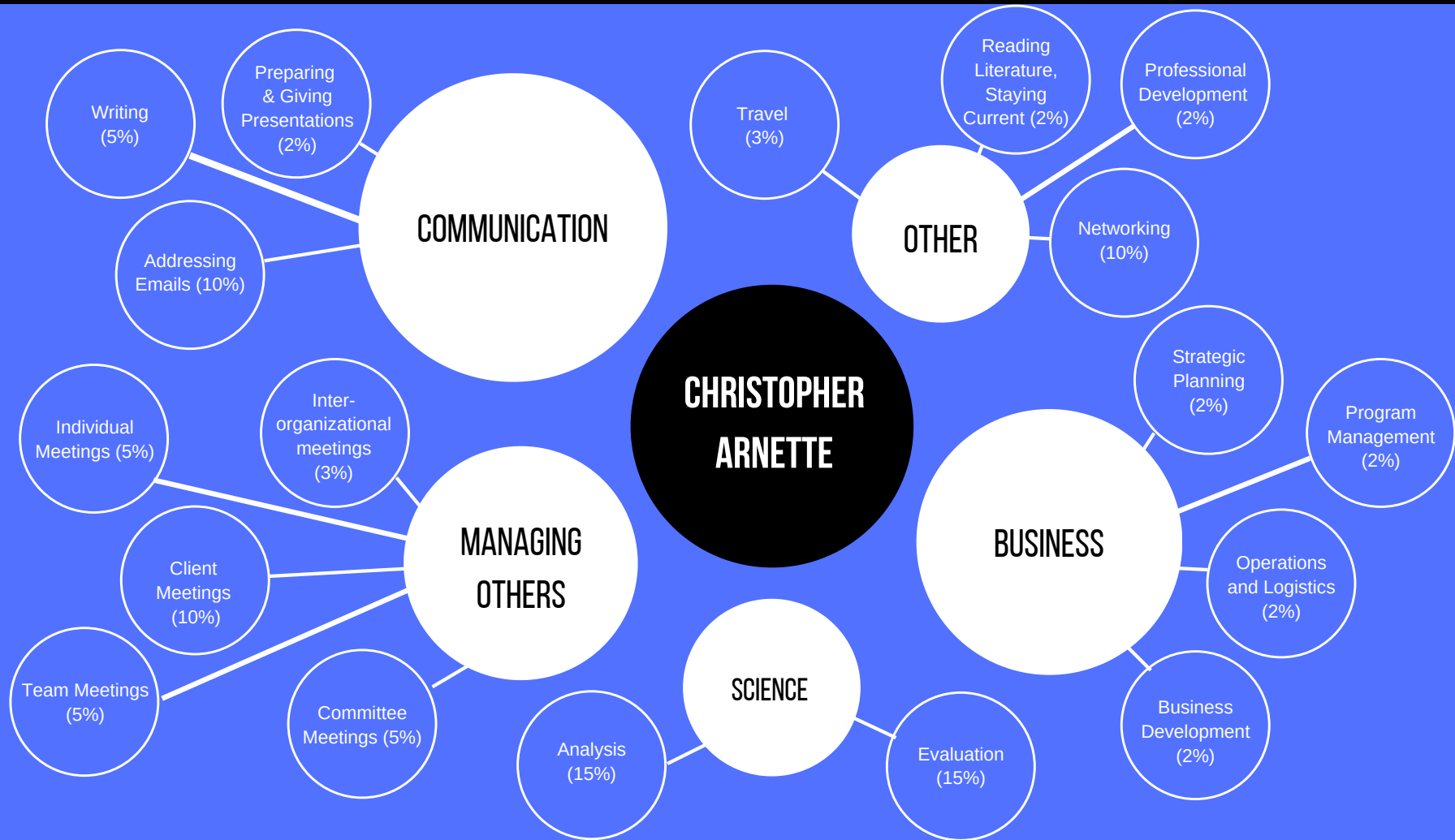
Extracurricular
Courses in
Communication
and Science
Writing

Editor Position
at Wiley



Dr. Christopher Arnette, PhD

Developmental Editor for Current Protocols, Wiley





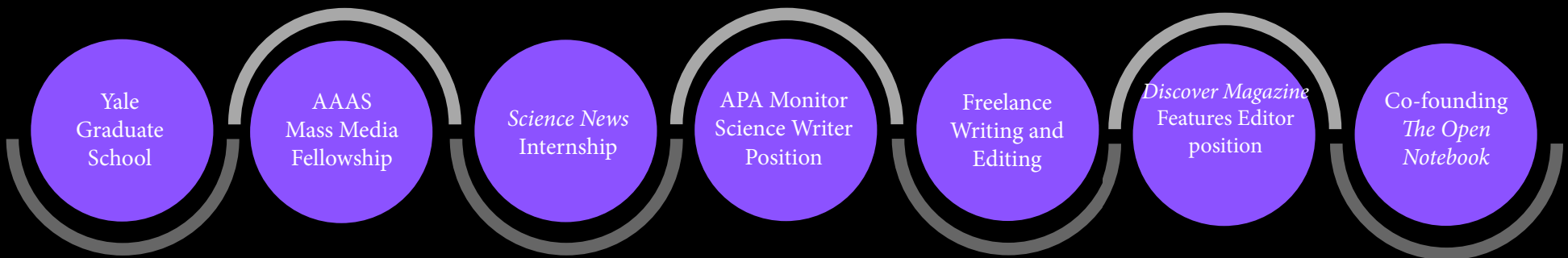
Dr. Siri Carpenter, PhD

Editor-in-Chief, The Open Notebook

Dr. Siri Carpenter, PhD, is an award-winning science journalist and editor based in Madison, Wisconsin. She received her PhD from Yale University in 2000. Dr. Carpenter has written and edited hundreds of stories that span the full breadth of science, from social psychology to medicine to particle physics. Her writing and editorial work has appeared in *The New York Times*, *Science*, *Discover*, *Scientific American*, *bioGraphic*, *Science News*, *Science News for Students*, and many other publications. She was a features editor at *Discover* from

2012 to 2014, and has worked as a contract editor for numerous publications, most regularly for *Science News for Students*. Carpenter is the full-time Editor-in-Chief of *The Open Notebook*, a non-profit publication that she co-founded in 2010, and which is dedicated to helping science journalists improve their skills. She's also the editor of *The Craft of Science Writing*, published by *The Open Notebook* in 2020. From 2018-2020, Dr. Carpenter was the President of the National Association of Science Writers.

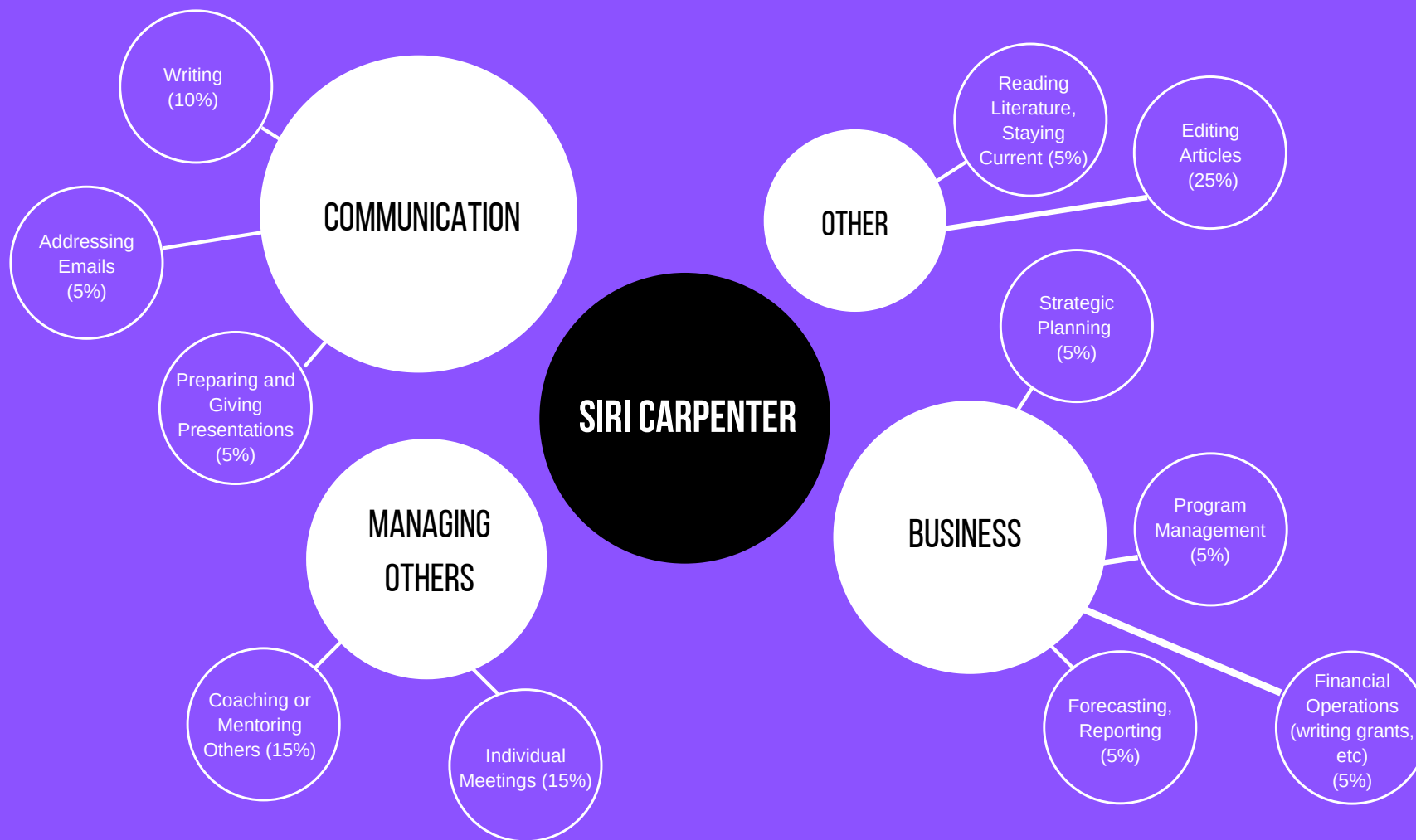
CAREER HIGHLIGHTS





Dr. Siri Carpenter, PhD

Editor-in-Chief, The Open Notebook





Dr. Sudipta Chakraborty, PhD

Clinical Trial Transparency Manager, PRA Health Sciences

Dr. Sudipta Chakraborty, PhD, is currently a Clinical Trial Transparency Manager for PRA Health Sciences, with a focus on plain language summaries (PLS). She has also served the role of Senior Medical Writer with PRA. Dr. Chakraborty has experience writing regulatory documents, including clinical study reports, protocols, and investigator's brochures, in a variety of therapeutic areas. Her current focus is on writing summaries of clinical trial results for

the public and trial participants using plain language and health literacy principles. Dr. Chakraborty's previous roles include medical writing for Synchrogenix, science writing for Demand Media in their health division, and serving as a science writing intern at the Albert Einstein College of Medicine. Dr. Chakraborty received her PhD in Neuroscience from Vanderbilt in 2015.

CAREER HIGHLIGHTS

Undergraduate
Research
Experience

PhD,
Neuroscience,
Vanderbilt
University

Writing Internship
at Albert Einstein
School of Medicine

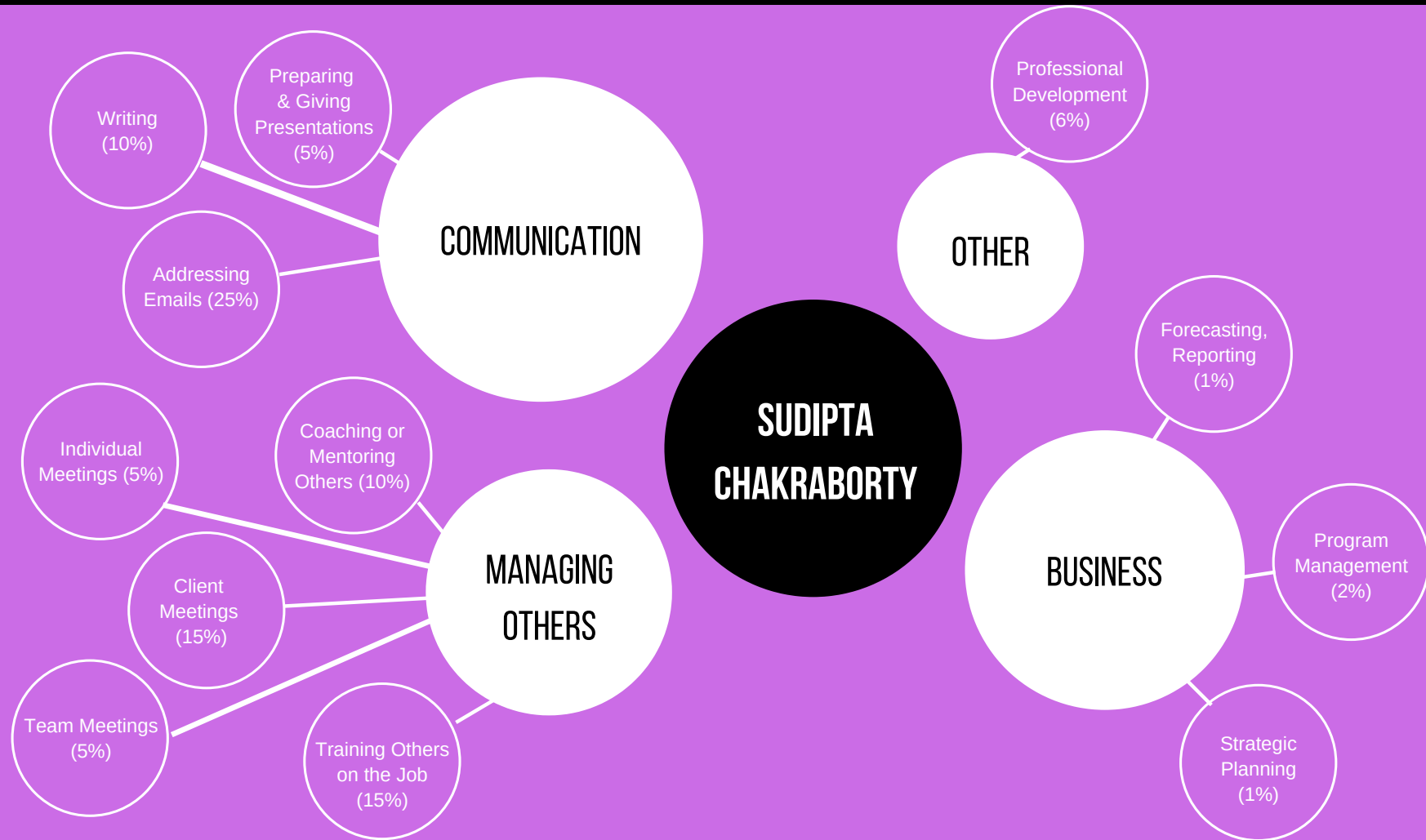
Medical
Writing Role at
Synchrogenix

Manager at
PRA Health
Sciences



Dr. Sudipta Chakraborty, PhD

Clinical Trial Transparency Manager, PRA Health Sciences



Many thanks to the 2021 Career Symposium Planning Committee!

Brenna Appleton, PhD Candidate, Vanderbilt University

Cassandra Awgulewitsch, PhD Candidate, Vanderbilt University

Wendy Bindeman, PhD Candidate, Vanderbilt University

Casey Butrico, PhD Candidate, Vanderbilt University

Heather Caslin Findley, PhD, Postdoctoral Research Fellow, Vanderbilt University

Colbie Chinowsky, PhD Candidate, Vanderbilt University

Sam Dooyema, PhD Candidate, Vanderbilt University

Laura Geben, PhD Candidate, Vanderbilt University

Pooja Joshi, PhD, Postdoctoral Research Fellow, Vanderbilt University Medical Center

Nicole Kendrick, PhD Candidate, Vanderbilt University

Sara Melow, PhD Candidate, Vanderbilt University

Deepika Nambiar, PhD, Postdoctoral Researcher, Vanderbilt University Medical Center

Tiffany Richardson, PhD Candidate, Vanderbilt University

Sohini Roy, PhD, Postdoctoral Research Fellow, Vanderbilt University Medical Center

Natalie Wallace, PhD Candidate, Vanderbilt University

Lauren Walker, PhD Candidate, Vanderbilt University

BRET Office of Career Development, ASPIRE Program, Vanderbilt University