## Papa Kobina Van Dyck

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RESEARCH INTERESTS Biophysics, Protein Structure and Dynamics, Bioinformatics and Computational Bi-

ology, Optical and Fluorescence Microscopy, and Cell Biology

EDUCATION

University of Notre Dame (IN), Doctor of Philosophy

08/2020 -

Biophysics

Advisor: Katharine A. White

Research: Determining pH-dependent functions of ionizable residue networks

DePauw University (IN), Bachelor of Arts

08/2016 - 05/2020

Cell and Molecular Biology Minors in Statistics and Physics Advisor: Pascal Lafontant

Research: Cauterization as a simple method for regeneration studies in the zebrafish

heart

RELEVANT RESEARCH pH Sensitive Proteins and Cell Behaviors

Advisor: Katharine A. White - University of Notre Dame (IN)

05/2021 -

Cardiovascular Regeneration Studies in the Zebrafish

Advisor: Pascal Lafontant - DePauw University (IN)

08/2017 - 05/2020

Cellular Environment Effects on Protein Stability and Dynamics

Advisor: Emily J. Guinn - DePauw University (IN)

08/2018 - 12/2019

05/2018 - 08/2018

Neuroimaging Data Science

Advisor: Joshua Vogelstein - Johns Hopkins University (MD)

Publications

[1] Papa Kobina Van Dyck, Natasha Hockaden, Emma C Nelson, Alyssa R Koch, Kamil L Hester, Neil Pillai, Gabrielle C Coffing, Alan R Burns, Pascal J Lafontant. Cauterization as a simple method for regeneration studies in the zebrafish heart Journal of cardiovascular development and disease 7 (4), 41

CONFERENCE TALKS & POSTER PRESENTATIONS

[1] Characterizing pH Molecular Mechanisms of Networks of Ionizable Residues

Biophysical Society Annual Meeting 2022- Poster

2/2022

[2] Characterizing pH Molecular Mechanisms of Networks of Ionizable Residues

AfroBiotech 2021- Poster

10/2021

	[3] Characterizing pH Molecular Mechanisms of Networks of Ionizable Residues	
	25th Annual John V. O'Connor Biochemistry and IBMS Research and tion Conference- Poster	nd Educa- 10/2021
	[4] Belonging and Optics of DePauw University's STEM Depart HSTEM 2021 NSF Conference- Talk and Poster	tments 6/2021
	[5] Examination of the effect of a Histidine tag and pH on the energy landscape of ACBP.	
	Experimental Biology Conference- Poster	4/2020
	[6] Cautery Injury Response in Zebra Fish Indiana Physiological Society Annual Meeting- Poster	3/2020
	$[\ensuremath{\mathcal{I}}]$ Examination of the effect of a Histidine tag and pH on the energy landscape of ACBP	
	$\begin{tabular}{ll} \it Midwest \ Conference \ on \ Protein \ Folding, \ Assemblies, \ \& \ Molecular \\ \it Poster \end{tabular}$	Motions-5/2019
	[8] Structure, Development, and Functional Morphology of the Gland of the Giant Danio	
	Indiana Physiological Society Annual Meeting- Poster	3/2019
Leadership, Outreach, & Mentoring	Biophysical Society Student Chapter (Co-Founder) Biophysics Student Selected Seminar Speaker (Organizer) Black Graduate Student Association (Treasurer) Students of Color in STEM (Co-Founder) First Year Experience Program Being Human in STEM- DePauw Chapter  8/2018 - 05/2019 - 01/2020 -	,
Achievements	Honors and Awards:  Biophysical Society Travel Grant	11/2021
	Prindle Prize (Science Thesis Award)	05/2020
	Douglas A. & Phyllis G. Smith Student Faculty Collaborative Award	04/2019
	Winner- Science Ethics Bowl	08/2017
	Science Research Fellowiship	08/2016
	Scholarships:  John S. & Dorothy M. Medaris Scholarship	04/2017
	Dr. Hakki B Ogelman Endowed Scholarship	04/2017
	Bonner Scholarship	04/2016
	Ubben DePauw Trust Scholarship	04/2016
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 ${\it Memberships} \qquad {\it Biophysical Society}$ 

American Society for Biochemistry and Molecular Biology

TEACHING EXPERIENCE

## DePauw University (IN) Teaching Assistant

CHEM120: Structure and Properties of Organic Molecules (Fall 2018- Fall 2019)

BIO241: Intermediate Cellular Biology (Spring 2020)

## Academic Resource Center-Quantitative Tutor

 $Biology-Introductory\ Courses,\ Cell\ Biology,\ Molecular\ Biology,\ Genomics,\ Biostatistics,\ and\ Bioinformatics$ 

Chemistry- General Chemistry, and Organic Chemistry

Physics- Introductory Courses, Modern Physics, Nuclear Physics, Classical Physics

Mathematics- Calculus 1-3, all Statistics Courses

Updated: December, 2021