OMB No. 0925-0001 and 0925-0002 (Rev. 10/2021 Approved Through 09/30/2024)

**BIOGRAPHICAL SKETCH**

Provide the following information for the Senior/key personnel and other significant contributors.

Follow this format for each person. DO NOT EXCEED FIVE PAGES.

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| --- |
| NAME: Desmarais, John |
| eRA COMMONS USER NAME (credential, e.g., agency login): jdesmarais |
| POSITION TITLE: Computational Postdoctoral Fellow |

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| INSTITUTION AND LOCATION | DEGREE (if applicable) | START DATE MM/YYYY | COMPLETION DATE MM/YYYY | FIELD OF STUDY |
| Middlebury College, Molecular Biology and Biochemistry, Middlebury, VT | B.A. | 09/2012 | 05/2016 | Molecular Biology and Biochemistry |
| University of California Berkeley, Molecular and Cell Biology, Berkeley, CA | PHD | 08/2016 | 08/2022 | Molecular and Cell Biology |
| University of California, Berkeley, Berkeley, CA | Postdoctoral Fellow | 10/2022 | 12/2022 | Postdoctoral Fellow in the Savage lab |
| Cold Spring Harbor Laboratory, Cold Spring Harbor, NY | Postdoctoral Fellow | 01/2023 | present | Computational Postdoctoral Fellow in the Kinney Lab |

### **A. Personal Statement**

### **B. Positions and Honors**

**Positions and Scientific Appointments**

|  |  |
| --- | --- |
| 2023 - | Computational Postdoctoral Fellow, Cold Spring Harbor Laboratory, Kinney Lab, Cold Spring Harbor, NY |
| 2022 - 2022 | Postdoctoral Fellow, University of California, Berkeley, Savage Lab, BERKELEY, CA |
| 2017 - 2019 | Graduate student instructor, University of California, Berkeley, BERKELEY, CA |
| 2016 - | Member, Phi Beta Kappa honor society, Middlebury, VT |
| 2016 - 2022 | Graduate student researcher, University of California, Berkeley, Savage Lab, BERKELEY, CA |
| 2015 - 2015 | Amgen Scholar, University of California, Berkeley, Joint Bioenergy Institute, Keasling Lab, BERKELEY, CA |
| 2014 - 2016 | Researcher, Middlebury College, Ward Lab, Middlebury, VT |
| 2014 - 2014 | Stowers Summer Scholar, Stowers Institute for Medical Research, Matt Gibson Lab, Kansas City, MO |
| 2013 - 2013 | Researcher, Middlebury College, 2013 STEM Innovation Program, Middlebury, VT |
| 2011 - 2012 | Intern, University of Washington Medical School, Neitz Color Vision Lab, Seattle, WA |

**Honors**

|  |  |
| --- | --- |
| 2013 - 2016 | College Scholar, 6 semesters, Middlebury college |
| 2017 | The 27th Annual Western Photosynthesis Conference travel award , Western Photosynthesis conference |
| 2016 | Elbert C. Cole ’15 Memorial Fund Prize, Middlebury College, Department of Biology |
| 2016 | Summa cum laude, Middlebury College |
| 2016 | High Honors, Middlebury College Department of Molecular Biology and Biochemistry |
| 2016 | Inducted Phi Beta Kappa honor society, Middlebury College |
| 2015 | Dean’s List, spring semester, Middlebury College |

### **C. Contribution to Science**

### **D. Scholastic Performance**

**Scholastic Performance**

|  |  |  |
| --- | --- | --- |
| YEAR | COURSE TITLE | GRADE |
| Middlebury College | | |
| 2012 | BIOL 0145 Cell Biology and Genetics | A- |
| 2012 | FYSE 1175 The Game of Go | A |
| 2012 | MATH 0122 Calculus II | A |
| 2012 | BIOL 0145 Cell Biology and Genetics Lab | CR |
| 2013 | INTD 0500 Independent Study | A |
| 2013 | BIOL 0140 Ecology and Evolution | A- |
| 2013 | ENAM 0270 South Asian African Carib Lit | A |
| 2013 | PHYS 0110 Electricity & Magnetism | A- |
| 2013 | RELI 0208 Sociology of American Religion | A- |
| 2013 | CHEM 0107 Advanced General Chemistry | A |
| 2013 | CLAS 0132 History of Rome | A- |
| 2013 | ECON 0155 Intro Microeconomics | A |
| 2013 | PHYS 0201 Relativity And Quantum Physics | A- |
| 2013 | CHEM 0107 Advanced General Chemistry Lab | CR |
| 2013 | PHYS 0110 Electricity & Magnetism Lab | CR |
| 2013 | BIOL 0140 Ecology and Evolution Lab | CR |
| 2014 | CHEM 0241 Organic Chemistry I | A |
| 2014 | CHEM 0242 Organic Chemistry II | A |
| 2014 | CMLT 0333 Dealing With The Devil | A |
| 2014 | CSCI 0150 Computing for the Sciences | A |
| 2014 | RUSS 0122 The Russian Mind (in English) | A- |
| 2014 | BIOL 0314 Molecular Genetics | A |
| 2014 | BIOL 0500 Independent Study | A |
| 2014 | CHEM 0322 Biochemistry of Macromolecules | A |
| 2014 | CSCI 0201 Data Structures | A |
| 2014 | BIOL 0314 Molecular Genetics Lab | CR |
| 2014 | CHEM 0242 Organic Chemistry II Lab | CR |
| 2014 | CHEM 0241 Organic Chemistry I Lab | CR |
| 2015 | INTD 1014 American Sign Language | A |
| 2015 | BIOL 0211 Biostatistics | B+ |
| 2015 | BIOL 0331 The Genetics of Cancer | A- |
| 2015 | BIOL 0500 Independent Study | A- |
| 2015 | CSCI 0202 Computer Architecture | A- |
| 2015 | CHEM 0425 Biochemistry Of Metabolism | A |
| 2015 | CSCI 0200 Math Foundations of Computing | A |
| 2015 | CSCI 0312 Software Development | A |
| 2015 | MBBC 0700 Senior Research | A |
| 2015 | BIOL 0211 Biostatistics Lab | CR |
| 2015 | BIOL 0331 The Genetics of Cancer Lab | CR |
| 2016 | MBBC 0700 Senior Research | A |
| 2016 | BIOL 0324 Bioinformatics and Genomics | A |
| 2016 | CSCI 0302 Algorithms and Complexity | A |
| 2016 | CSCI 0314 Operating Systems | A |
| 2016 | MBBC 0701 Senior Thesis | A |
| 2016 | BIOL 0324 Bioinformatics & Genomics Lab | CR |
| University of California Berkeley | | |
| 2016 | MCELLBI 200A - Fundamentals of Molecular and Cell Biology | A |
| 2016 | MCELLBI 200B - Fundamentals of Molecular and Cell Biology | A |
| 2016 | MCELLBI 280A - Selected Topics in Molecular and Cell Biology | S |
| 2016 | MCELLBI 291A - Introduction to Research | A |
| 2016 | MCELLBI 293A - Research Seminar | S |
| 2017 | MCELLBI 206 - Physical Biochemistry | A |
| 2017 | MCELLBI C212A - Chemical Biology I - Structure, Synthesis and Function of Biomolecules | A+ |
| 2017 | MCELLBI C212B - Chemical Biology II - Enzyme Reaction Mechanisms | A |
| 2017 | MCELLBI C212C - Chemical Biology III - Contemporary Topics in Chemical Biology | A- |
| 2017 | MCELLBI 291B - Introduction to Research | A |
| 2017 | MCELLBI 293C - Responsible Conduct, Rigor and Reproducibility in Research | S |
| 2017 | MCELLBI 295 - Careers for Life Sciences Ph.D's | S |
| 2017 | MCELLBI 218X - Research Review in Biochemistry and Molecular Biology: Chemical Reactions of Metabolism | S |
| 2017 | MCELLBI 292 - Research | A |
| 2017 | MCELLBI 380 - Teaching of Molecular and Cell Biology | S |
| 2018 | MCELLBI 218X - Research Review in Biochemistry and Molecular Biology: Chemical Reactions of Metabolism | S |
| 2018 | MCELLBI 292 - Research | A |
| 2018 | MCELLBI 218X - Research Review in Biochemistry and Molecular Biology: Chemical Reactions of Metabolism | S |
| 2018 | MCELLBI 292 - Research | S |
| 2018 | MCELLBI 294 - Current Topics in Biomedical Sciences | S |
| 2019 | MCELLBI 218X - Research Review in Biochemistry and Molecular Biology: Chemical Reactions of Metabolism | S |
| 2019 | MCELLBI 292 - Research | A |
| 2019 | MCELLBI 380 - Teaching of Molecular and Cell Biology | S |
| 2019 | MCELLBI 218X - Research Review in Biochemistry and Molecular Biology: Chemical Reactions of Metabolism | S |
| 2019 | MCELLBI 290 SEM A02 - Graduate Seminar | A+ |
| 2019 | MCELLBI 290 SEM D01 - Graduate Seminar | A+ |
| 2019 | MCELLBI 292 - Research | A |
| 2019 | MCELLBI 294 - Current Topics in Biomedical Sciences | S |
| 2020 | MCELLBI 218X - Research Review in Biochemistry and Molecular Biology: Chemical Reactions of Metabolism | S |
| 2020 | MCELLBI 290 - Graduate Seminar | A |
| 2020 | MCELLBI 292 - Research | A |
| 2020 | MCELLBI 293R - Responsible Conduct of Research Refresher | S |
| 2020 | MCELLBI 295 - Careers for Life Sciences Ph.D's | S |
| 2020 | MCELLBI 218X - Research Review in Biochemistry and Molecular Biology: Chemical Reactions of Metabolism | S |
| 2020 | MCELLBI 292 - Research | A |
| 2021 | MCELLBI 218X - Research Review in Biochemistry and Molecular Biology: Chemical Reactions of Metabolism | S |
| 2021 | MCELLBI 292 - Research | A |
| 2021 | MCELLBI 218X - Research Review in Biochemistry and Molecular Biology: Chemical Reactions of Metabolism | S |
| 2021 | MCELLBI 290 - Graduate Seminar | A+ |
| 2021 | MCELLBI 292 - Research | A |
| 2022 | MCELLBI 218X - Research Review in Biochemistry and Molecular Biology: Chemical Reactions of Metabolism | S |
| 2022 | MCELLBI 292 - Research | A |
| 2022 | MCELLBI 294 - Current Topics in Biomedical Sciences | S |

For all Middlebury College undergraduate level courses, The scale is from A to F (with no A+ or F-) and passing grades are C- or higher. In this scale an A is a 4.00, an A- is a 3.67, and a B+ is a 3.33. A CR indicates receiving credit for a lab course, lab courses are not given an independent grade, as their corse work is graded as part of the associated lecture course.

For all University of California Berkeley graduate level courses, the scale is from A to F (A+ is awarded as a mark of achievement but both A+ and A are counted as 4.0 for GPA calculations) and passing grades are B- or higher. In this scale A+ is a 4.0, A is also 4.0, and an A- is a 3.7. S indicates a passing grade (B- or higher) in a course graded on a Satisfactory/Not Satisfactory grading scheme, courses graded on this scheme are not included in GPA calculations.