Committee: Directly to Council
Committee Review: N/A
Staff: Nicole Rodriguez-Hernandez, Legislative Analyst
Purpose: To receive testimony/final action - vote expected
Keywords: #MontgomeryCollege #ignITe Hub

REVISED
AGENDA ITEM #21
July 26, 2022
Public Hearing/Action

Montgomery
County Council

SUBJECT

Supplemental Appropriation to Montgomery College's FY23 Operating Budget, $260,000 for ignITe Hub (Source of Funds: Undesignated Reserves)

EXPECTED ATTENDEES

None

COUNCIL DECISION POINTS & COMMITTEE RECOMMENDATION

None

DESCRIPTION/ISSUE

The County Council will receive testimony and consider action on a supplemental appropriation to Montgomery College's FY23 Operating Budget, $260,000 for the ignITe Hub. The source of funds is undesignated reserves.

SUMMARY OF KEY DISCUSSION POINTS

- The County Executive recommended this supplemental appropriation for the ignITe Hub on July 7, 2022. The Council introduced this appropriation on July 12, 2022.

- The ignITe Hub (formerly known as the Innovation Hub) opened May 2022 and is an outgrowth of the Montgomery Can Code program to expand ongoing efforts with Apple to grow economic opportunity in the County. Specifically, the goals of the ignITe Hub include expanding access to STEM education, technology, and careers in tech in addition to serving as a location for community-based problem solving, entrepreneurship, innovation and collaboration. All efforts are undertaken with an equity lens. Montgomery College is the host of the County-led ignITe Hub.

- **The supplemental appropriation will increase the required annual local funding contribution from the County to Montgomery College by $260,000 due to Maintenance of Effort (MOE) requirements.** In May 2022, the Council approved a FY23 operating budget total that was $2,500,000 over MOE-- including $500,000 over the College's original fully funded FY23 request. At the same time, the Council acknowledged that Montgomery College's fund balance total was not in line with the Council's recommended 3-5% fund balance amount as dictated in the Council's approved Reserve and Select Fiscal Policies for the College. **The College's fund balance as of June 22, 2022 is $23.5 million or at 15.7%.** During the FY23 operating budget review, the

Council shifted $5.06 million from the County Contribution request to fund balance to bring the total closer to the approved policies and reduce the impact on MOE.

- This supplemental will advance the work of the Hub by funding new program components and activities such as Student Fellows, Teacher Fellows, career pathways, and IT training funds—the FY23 appropriation builds on the first $500,000 FY22 appropriation which provided funding for basic operations and three staff people.

  - Student Fellows: Training and internship stipends for select students to receive a year of intensive coding activities and an opportunity to intern as lab assistants.
  - Teacher Fellows: Training for MCPS teachers who teach or integrate computer science in the classroom.
  - Career Pathways: Career coaching on IT and entrepreneurship career pathways.
  - IT Training Funds: Training opportunities in information technology and entrepreneurship certificates.

- The Office of Racial Equity & Social Justice's findings within their Racial Equity Impact Assessment for this appropriation were inconclusive. The assessment notes *"There are clear racial disparities and inequities in STEM education and occupations and that the IgnITe Hub is well positioned to address these inequities. However, an absence of detail about the activities funded under this supplemental appropriation make it difficult to conclude to what extent it will help to address inequities and advance racial equity and social justice in the County."* **Council staff recommends a more in-depth briefing on the ignITe Hub activities and how it is addressing racial equity and social justice inequities at a future Education & Culture committee.**

This report contains:

County Executive Recommendation (July 7, 2022)	©1
Draft Supplemental Appropriation Resolution	©2
REIA	©4

MEMORANDUM

July 7, 2022

TO: Gabe Albornoz, President
           Montgomery County Council

FROM: Marc Elrich, County Executive

SUBJECT: Supplemental Appropriation #23-10 to the FY23 Operating Budget
           Montgomery College
           ignITe Hub, $260,000 (Source of Funds: General Fund: Undesignated Reserves)

I am recommending a supplemental appropriation to the FY23 Operating Budget of Montgomery College in the amount of $260,000 for the ignITe Hub. This appropriation will advance the work of the ignITe Hub by expanding summer activities and adding student and teacher fellowships, career pathway coaching, and information technology training.

- Expansion of the Montgomery Can Code summer program to 1,500 students.

- Student Fellows – Training and internship stipends for select students who will receive a year of intensive coding activities and an opportunity to intern at the lab as lab assistants.

- Teacher Fellows – Training for MCPS teachers who teach or integrate computer science in the classroom.

- Career Pathways Coaching Contract – Career coaching on IT career pathways as well as entrepreneurship pathways, especially for less affluent students.

- IT Training Funds – Training opportunities in information technology certificates and entrepreneurship certificates to less affluent students.

I recommend that the County Council approve this supplemental appropriation in the amount of $260,000 and specify the Source of Funds as General Fund: Undesignated Reserves.

I appreciate your prompt consideration of this action.

cc: Dr. Jermaine F. Williams, President, Montgomery College
    Jennifer Bryant, Director, Office of Management and Budget

COUNTY COUNCIL
FOR MONTGOMERY COUNTY, MARYLAND

By: Council President at the Request of the County Executive

SUBJECT: Supplemental Appropriation #23-10 to the FY23 Operating Budget
Montgomery College
ignITe Hub, $260,000 (Source of Funds: General Fund: Undesignated Reserves)

Background

1. Section 307 of the Montgomery County Charter provides that any supplemental appropriation shall be recommended by the County Executive who shall specify the source of funds to finance it. The Council shall hold a public hearing on each proposed supplemental appropriation after at least one week's notice. A supplemental appropriation that would comply with, avail the County of, or put into effect a grant or a Federal, State or County law or regulation, or one that is approved after January 1 of any fiscal year, requires an affirmative vote of five Councilmembers. A supplemental appropriation for any other purpose that is approved before January 1 of any fiscal year requires an affirmative vote of six Councilmembers. The Council may, in a single action, approve more than one supplemental appropriation. The Executive may disapprove or reduce a supplemental appropriation, and the Council may reapprove the appropriation, as if it were an item in the annual budget.

2. The County Executive has requested the following FY23 Operating Budget appropriation increases for Montgomery College:

Personnel Services	Operating Expenses	Capital Outlay	Total	Source of Funds
$0	$260,000	$0	$260,000	General Fund: Undesignated Reserves

(2)

4. This increase is needed to advance the work of the ignITe Hub by expanding summer activities and adding student and teacher fellowships, career pathway coaching, and information technology training. The ignITe Hub is an outgrowth of the successful Montgomery Can Code (MCC) program—a partnership with MCPS, MCEDC, Montgomery College, and private sector firms. The goals of the ignITe Hub, working with an equity lens, are to expand access to education in STEM fields, technology, careers in tech, and to spur community-based problem solving, entrepreneurship, innovation, and collaboration. Students, educators, emerging businesses, nonprofits, and community leaders/residents have access to the space and its resident technology.

5. Notice of public hearing was given, and a public hearing was held.

<u>Action</u>

The County Council for Montgomery County, Maryland, approves the following action:

A supplemental appropriation to the FY23 Operating Budget of Montgomery College is approved as follows:

Personnel Services	Operating Expenses	Capital Outlay	Total	Source of Funds
$0	$260,000	$0	$260,000	General Fund: Undesignated Reserves

This is a correct copy of Council action.

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Judy Rupp
Clerk of the Council

(3)

MEMORANDUM

July 21, 2022

To: Jennifer Bryant, Director
           Office of Management and Budget

From: Tiffany Ward, Director
           Office of Racial Equity and Social Justice

Re: Racial Equity Impact Assessment (REIA) for Supplemental Appropriation (SA) #23-10 for IgnITe Hub

I.   **FINDING:** The Office of Racial Equity and Social Justice (ORESJ)'s finding regarding Supplemental Appropriation #23-10 is inconclusive. There are clear racial disparities and inequities in STEM education and occupations and that the IgnITe Hub is well positioned to address these inequities. However, an absence of detail about the activities funded under this supplemental appropriation make it difficult to conclude to what extent it will help to address inequities and advance racial equity and social justice in the County.

II.   **BACKGROUND:** The purpose of Supplemental Appropriation #23-10 is to build the capacity of the Montgomery County IgnITe Hub to expand its technology training and other program offerings. The ignITe Hub is an outgrowth of the Montgomery Can Code (MCC) program—a partnership with Montgomery County Public Schools (MCPS), Montgomery County Economic Development Corporation (MCEDC), Montgomery College (MC), and private sector firms. Available information indicates that the goals of the ignITe Hub are to "expand access to education in STEM fields, technology, careers in tech, and to spur community-based problem solving, entrepreneurship, innovation, and collaboration"[1]. Since 2019, the Hub has reached more than 3,000 students.

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[1] Supplemental Appropriation #23-10 Memo from County Executive, Marc Elrich to Gabe Albornoz, President Montgomery County Council on July 7, 2022.

Typically, to understand the extent to which a supplemental appropriation may advance racial equity and social justice in the County, we look at racial disparities or inequities that may be present in the area of policy or practice being funded and then we look at the process (eligibility, selection criteria, barriers to access, and administrative burden) and envisioned outcomes described in the funding request to determine whether they will support a reduction of racial disparities or inequities.

Inequities in STEM[2] education are well documented and are closely linked to ongoing inequities in STEM occupations[3]—occupations in a growth sector with higher pay. As with other educational inequities, students of color and students experiencing poverty are disproportionately burdened by fewer opportunities to obtain STEM skills and knowledge. The intersection of gender and geography exacerbates these inequities. A 2021 article from the University of Texas Arlington summarizes the root causes stating: "STEM education has traditionally failed to equitably serve and educate women, members of minority groups, economically disadvantaged people and other populations. This failure is rooted in systemic racism, gender discrimination, classism and other conscious and unconscious biases and stereotypes woven into U.S. educational systems and pedagogy."[4]

Factors that stem from these root causes, include underinvestment in training and support for STEM teachers and learning environments that don't always support or build the confidence STEM learners[5], particularly girls and students from marginalized backgrounds. In addition, there are overarching and persistent opportunity and performance gaps that disproportionately impact students of color and low-income students. For example, research suggests that after Grade 5, it is very difficult to recoup losses in math and science learning. In Montgomery County academic performance metrics indicate that Black and Hispanic students as well as students participating in Free and Reduced Prices Meals Program (FARMS), special education, and English to Speakers of Other Languages (ESOL) are most likely to be impacted by these early learning losses. See table below illustrating gaps in grade-level Math PARCC (Partnership for Assessment of Readiness for College and Careers) benchmarks.

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[2] STEM refers to Science, Technology, Engineering, and Math
[3] The Pew Center refers to STEM jobs as jobs defined solely based on occupation and include any of the 74 standard occupations in life sciences, physical, and Earth sciences, engineering and architecture, computer and math occupations as well as health-related occupations including healthcare providers and technicians. See page 5 of "STEM Jobs See Uneven Progress in Increasing Gender, Racial and Ethnic Diversity".
[4] University of Texas Arlington Online. "The Importance of Equity in STEM" July 26, 2021. Available at: https://academicpartnerships.uta.edu/articles/education/equity-in-stem-education.aspx#:~:text=Why%20Is%20Equity%20Lacking%20in,disadvantaged%20people%20and%20other%20populations
[5] Talia Milgrom-Elcott. Brookings. "Rising to the challenge of providing all students with high-quality STEM education: Lessons from 100kin10". March 23, 2022. Available at: https://www.brookings.edu/blog/brown-center-chalkboard/2022/03/23/rising-to-the-challenge-of-providing-all-students-with-high-quality-stem-education/

Percent of MCPS Students (grade 3-5) by Race, Ethnicity, and Service Group Meeting Performance Benchmarks in Math, 2019

Race/Ethnicity/Service Group Status	Asian	Black	Latino	Two or more races	White	FARMs	Special Education	ESOL
% of students meeting the Math PARCC[6] 3-5 Performance Benchmark	79.8%	34.4%	30.1%	64.1%	71.8%	27.3%	18.1%	16.5%

These gaps along with structural inequities in higher education attainment (related to employment, income, housing, and wealth disparities) result in a STEM workforce that is disproportionately White and male. ORESJ wrote about the systemic factors that shape these inequities, specifically as they relate to entrepreneurship, in a racial equity impact assessment (REIA) of Supplemental Appropriation #22-59 Business Advancement Team, Life Science & Technology Center (P789057)[7]. To complement that analysis, below are a series of data points from the Pew Research Center about just how significant the race and gender gaps are in the STEM workforce[8]:

- Black and Hispanic adults are less likely to earn degrees in STEM than other degree fields, and they continue to make up a lower share of STEM graduates relative to their share of the adult population. Further, representation of Black and Hispanic adults is lowest in math, physical sciences and engineering degree fields.

- Black and Hispanic workers are underrepresented in the STEM workforce compared to their representation in the workforce overall. Black workers make up 11% and Hispanic workers make up 17% of the total US workforce, but only 9% and 8% of STEM workforce respectively. These gaps vary by job clusters within the STEM workforce. For example, as few as 5% of engineering jobs are held by Black workers, compared to White workers who hold 71% of engineering jobs.

- The racial and gender wage gaps in STEM occupations are more pronounced than they are in the labor market overall and persist when controlling for education and job characteristics. Median annual earnings of Black and Hispanic full-time, year-round workers, age 25 and older are 78% and 83% (respectively) of the median annual earnings

[6] PARCC stands for Partnership for Assessment of Readiness for College and Careers
[7] ORESJ. REIA of SA 22-59 Business Advancement Team, Life Science & Technology Center (P789057). February 17, 2022. Available at: https://www.montgomerycountymd.gov/ore/Resources/Files/22-59.pdf
[8] The following points are summarized from Pew Research Center, April 2021, "STEM Jobs See Uneven Progress in Increasing Gender, Racial and Ethnic Diversity". Available at: https://www.pewresearch.org/science/2021/04/01/stem-jobs-see-uneven-progress-in-increasing-gender-racial-and-ethnic-diversity/

of White workers in STEM. The earnings of a typical Asian man in a STEM job are the highest across gender and racial groups, while the earnings of a typical Black or Hispanic woman are the lowest.

There are many programs and practices with the goal of expanding equitable access to STEM education and career opportunities. In the time available, ORESJ identified the following:

- Demystifying STEM teaching professions[9];

- Preparing and retaining STEM teachers, focusing on the diversity of the teacher workforce[10];

- Fostering a culture that embraces equity as a core operating principle, recognizing and affirming the perspectives of students, teachers, and administrators ~~for~~ of color, centering them in decision-making and the development of pedagogical approaches[11];

- Reexamine the usefulness or harm of certification and licensure exams[12];

- Explore evidence-based mentorship models for teachers and students[13];

- Shrink gaps in foundational math and science[14];

- Explore and interrupt implicit biases that negatively affect teaching practices, program design, and overall student learning experience[15];

- Informal learning environments can be particularly effective at engaging youth from nondominant groups in science learning and identification[16]; and

- Access to quality space and equipment [17].

At the time of this analysis, ORESJ did not have access to details pertaining to how inequities previously described were considered or to what extent practices like the ones

[9] Talia Milgrom-Elcott.

[10] National Academies of Science. Educational Pathways for Black Students in Science, Engineering, and Medicine: Exploring Barriers and Possible Interventions: Proceedings of a Workshop. 2022. Available at: https://nap.nationalacademies.org/catalog/26391/educational-pathways-for-black-students-in-science-engineering-and-medicine

[11] Ibid.

[12] Ibid.

[13] Ibid.

[14] Talia Milgrom-Elcott.

[15] STEM Teaching Tools. Practice Brief 15. Available at: https://stemteachingtools.org/brief/15 and National Academies of Science. A Framework for K-12 Science Education: Practices, Crosscutting Concepts, and Core Ideas. 2012. Available at: https://nap.nationalacademies.org/read/13165/chapter/16

[16] Ibid.

[17] https://stemteachingtools.org/brief/15 and https://nap.nationalacademies.org/read/13165/chapter/16

mentioned above were incorporated. It is therefore difficult to determine what aspects of STEM inequities are targeted with this funding and whether appropriate strategies, programs, or practices will be deployed to address them.

cc: Ken Hartman, Director, Office of Strategic Partnership, Office of the County Executive
          Gail Roper, Director, Department of Technology and Enterprise Business Solutions